VOLUME XLVII NUMBER TWO

The NATIONAL GEOGRAPHIC MAGAZINE

FEBRUARY, 1925

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Cairo to Cape Town, Overland:

An Adventurous Journey of 135 Days, Made by an American Man and His Wife, Through the Length of the African Continent

With 103 Illustrations FELIX SHAY

Amid the Snows and Swamps of Tropical Africa

16 Full-page Illustrations in Duotone

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ARTICLES and photographs are desired. For material which the Magazine can use, generous remuneration is made. Contributions should be accompanied by an addressed return envelope and postage.

IMMEDIATELY after the terrific eruption of the world's largest crater, Mt. Katmai, in Alaska, a National Geographic Society expedition was sent to make observations of this remarkable phenomenon. Four expeditions have followed and the extraordinary scientific data resulting given to the world. In this vicinity an eighth wonder of the world was discovered and explored—"The Valley of Ten Thousand Smokes," a vast area of steaming, spouting fissures. As a result of The Society's discoveries this area has been created a National Monument by proclamation of the President of the United States.

AT an expense of over $50,000 The Society sent a notable series of expeditions into Peru to investigate the traces of the Inca race. Their discoveries form a large share of our knowledge of a civilization waning when Pizarro first set foot in Peru.

THE Society also had the honor of subscribing a substantial sum to the expedition of Admiral Peary, who discovered the North Pole.

NOT long ago The Society granted $25,000, and in addition $75,000 was given by individual members to the Government when the congressional appropriation for the purpose was insufficient, and the finest of the giant sequoia trees of California were thereby saved for the American people.

THE Society is conducting extensive explorations and excavations in northwestern New Mexico, which was one of the most densely populated areas in North America before Columbus came, a region where prehistoric peoples lived in vast communal dwellings and whose customs, ceremonies, and name have been engulfed in an oblivion.

THE Society also is maintaining expeditions in the unknown area adjacent to the San Juan River in southeastern Utah, and in Yunnan, Kweichow, and Kansu, China—all regions virgin to scientific study.

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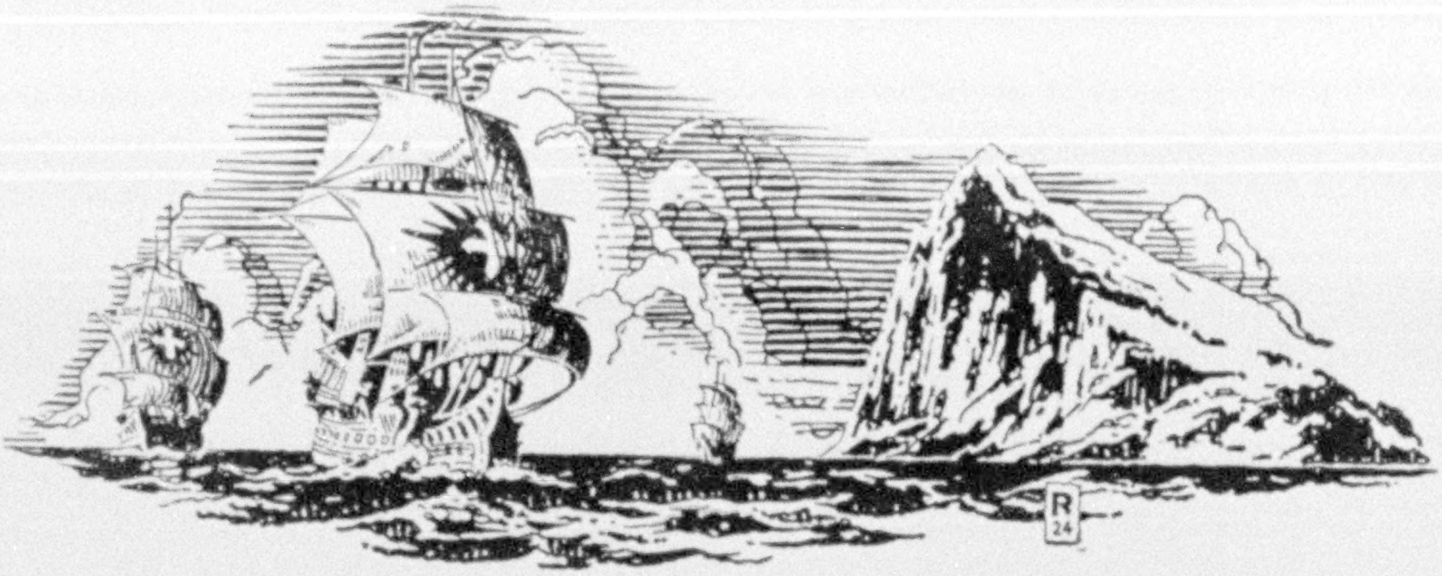

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An Indian once traded Manhattan Island for

A STRING OF RED BEADS

An Indian once swapped Manhattan Island for a string of red beads. ℂ Not so long ago a fellow in Texas traded a great tract of now priceless oil land for a span of gray mules. ℂ And last year a lot of smart people paid $1000, $2000—even $3000, more for a closed car than an open car of the same make would have cost them. ℂ These are historical facts.

AS long as people knew very little about downtown New York real estate, or oil land, or Closed Cars—great *unconscious* economic losses were sustained.

Today, you couldn't get very far in New York on a string of red beads. The owners of the oil land probably aren't scanning the market pages for quotations on gray mules.

And after people see the *New* Marmon Standard Sedan *at only $130* more than the open car, getting a fictitious price for any closed car is going to be a tough selling job.

People have begun to figure how much more it *really should* cost to make a *closed car*. When people begin to figure, they ask questions. And when they begin to ask questions

—something always happens!

The people's own common sense tells them that it shouldn't cost a great deal more to make a *genuine sedan* than it costs to make an open car—and they are ready to fight their case out to a finish on every *Automobile Row*.

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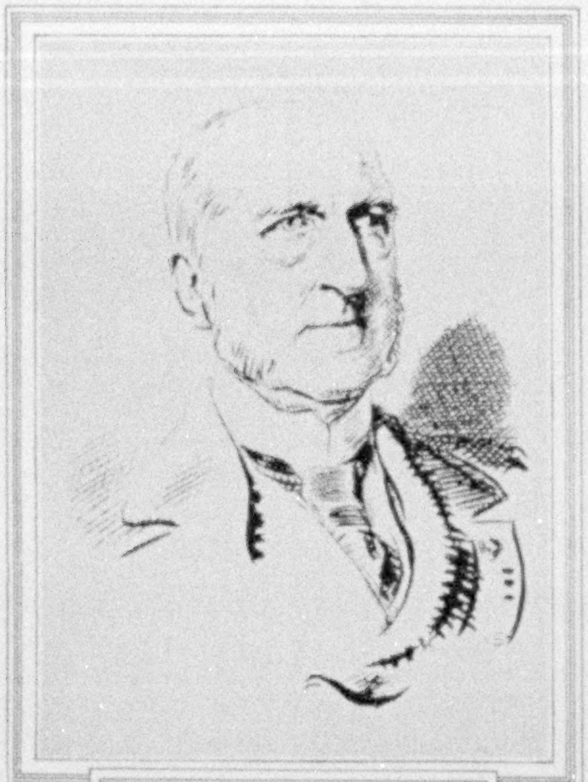

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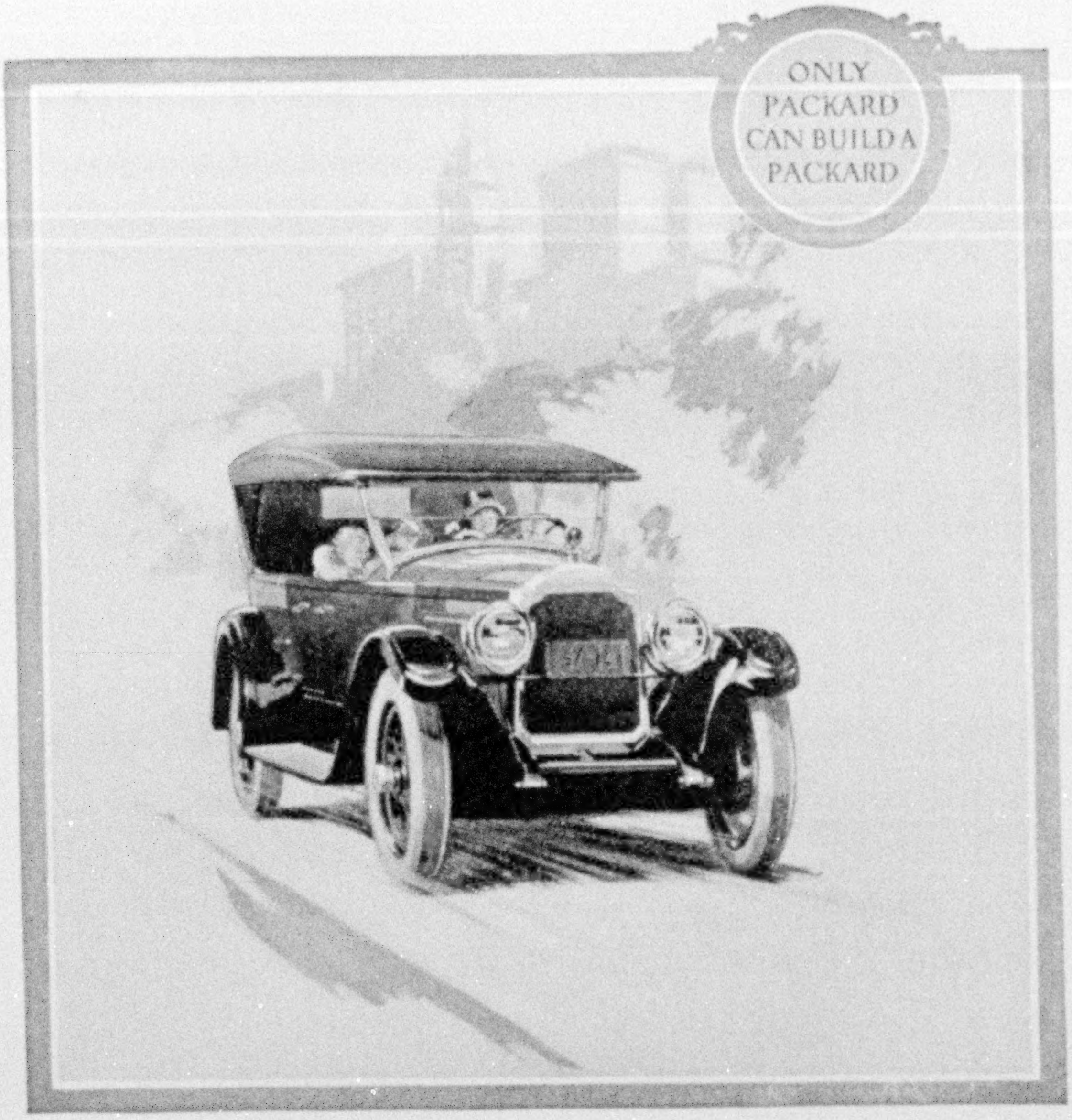

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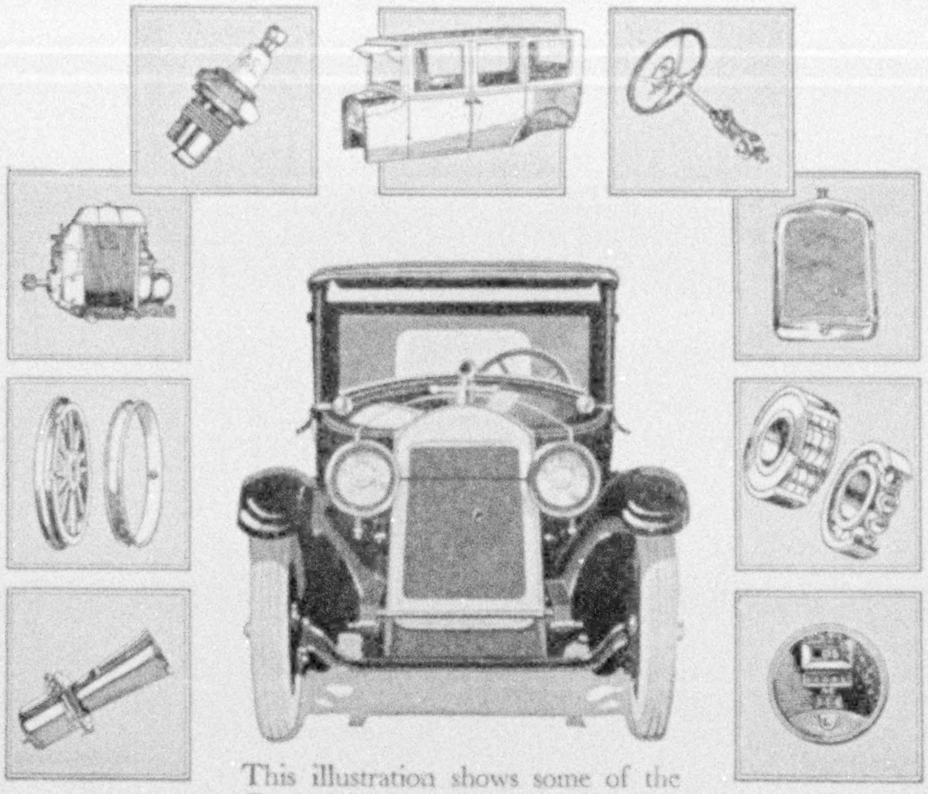

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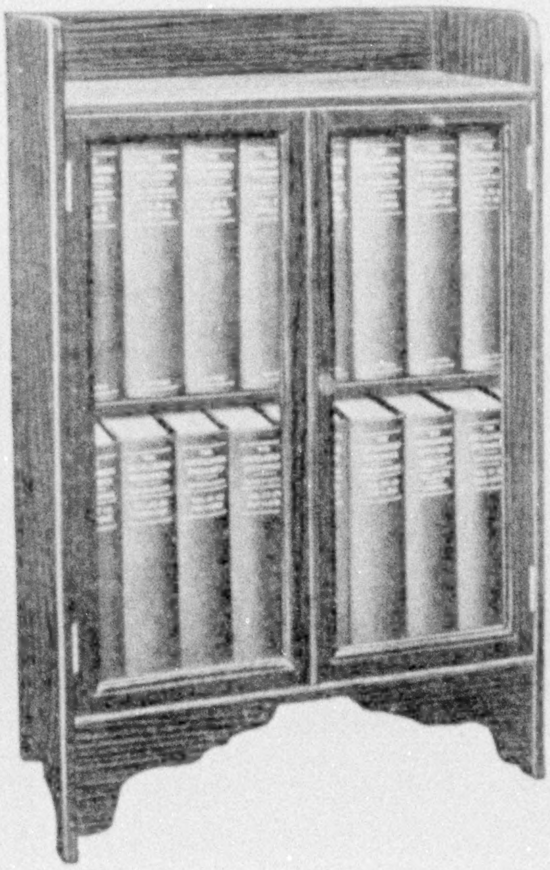

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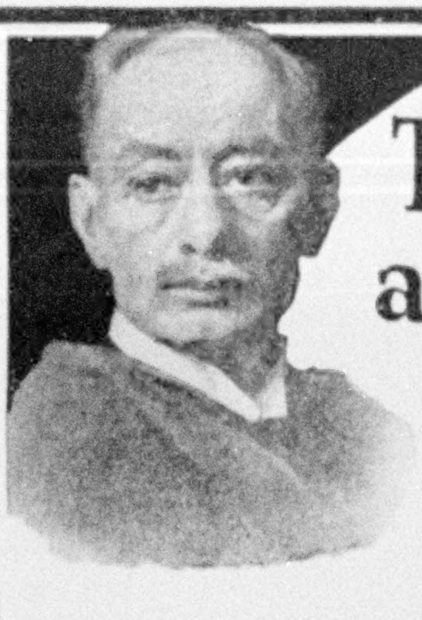

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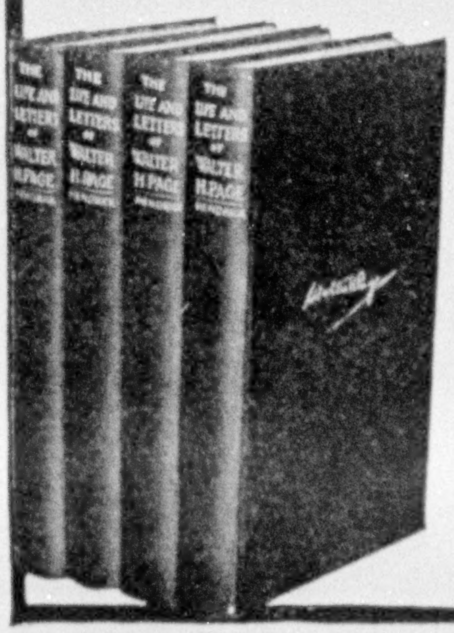

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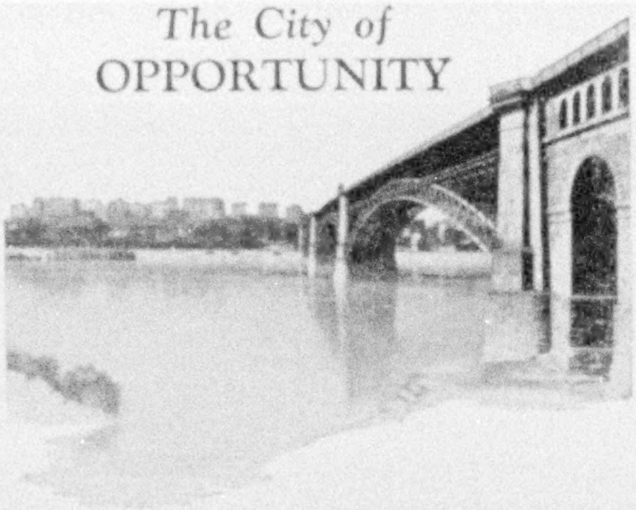

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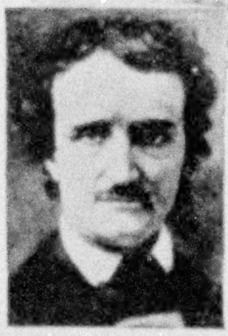
of Poe's life

(Copyright, A. G. Learned)

Poe's wife, Virginia, the inspiration of "Annabel Lee," from the water-color sketch by A. G. Learned. She shared Poe's bitter poverty to the end, dying in the little Fordham cottage that has since become a shrine for worshipers of Poe.



IN his hauntingly beautiful poem "Annabel Lee," Edgar Allan Poe immortalized his love for his child wife, the gentle, delicate creature whose devotion furnished the one bright chapter in his ill-starred life. And even in this, the tragedy which seemed to dog his every step came to rob him of his happiness.

. . . *"the wind came out of*
the cloud by night,
Chilling and killing my
Annabel Lee."

Never was there a more unhappy mortal than Poe. Wretched in his death as in his life, he never dreamed that his bust would one day stand in the Hall of Fame!

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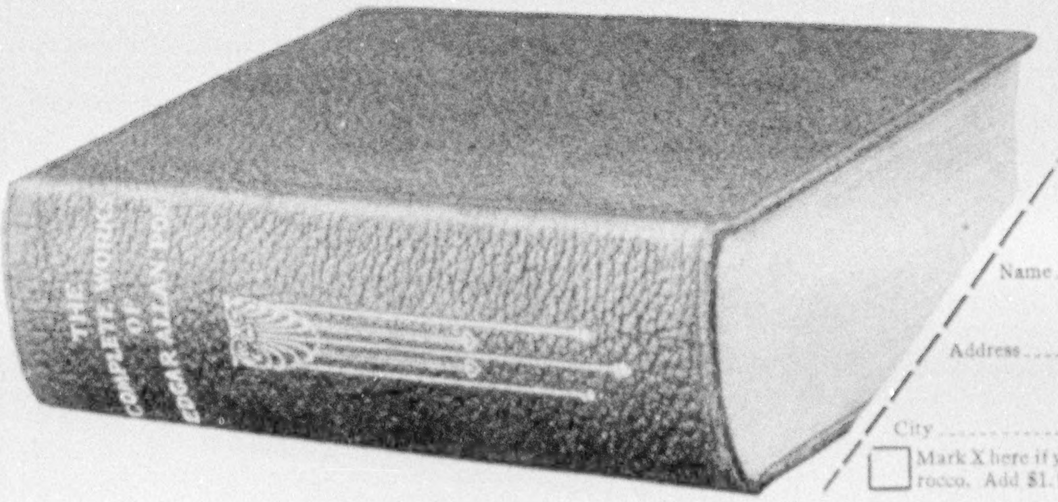

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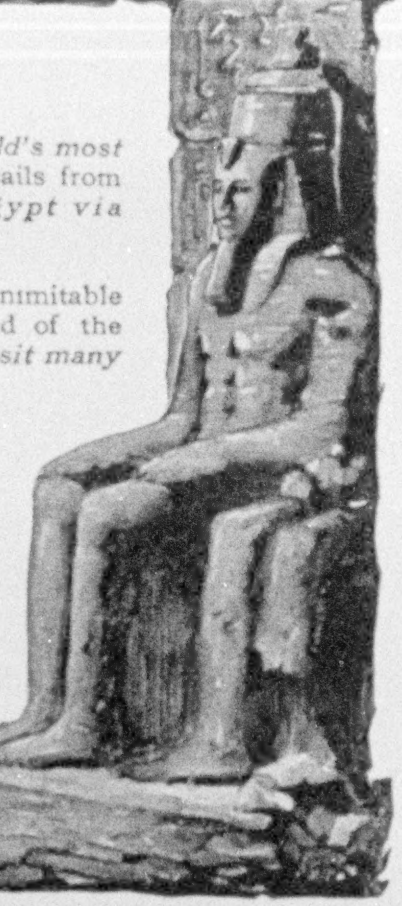

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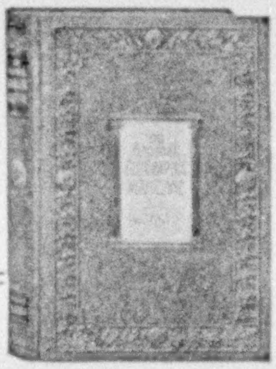

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Californians have about twice the average American bank account — because opportunities in California are exceptionally great. Crops are planted and harvested every month in the year in the Great Central Valley. In business and industry, efficiency is higher, costs are lower. In every walk of life people live more comfortably.

Many come to San Francisco

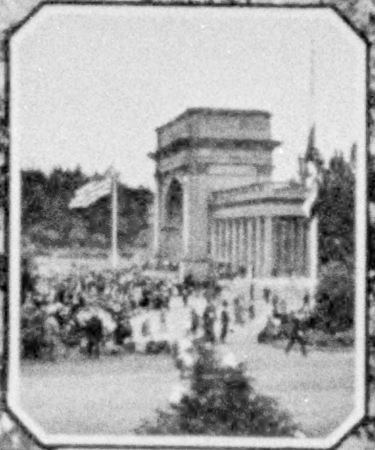
Thousands of people are locating in San Francisco — to live near the sea, to educate their children in the excellent public schools or nearby universities, to take advantage of the many fine manufacturing opportunities or because they find contented employment, and together with their employers, are working out the destiny of this splendid city.

Is this YOUR opportunity?

You need only a moderate stake to start, in California. Write today for "California, Where Life Is Better"—an illustrated, reliable free booklet, published by Californians Inc., a non-profit organization devoted to the sound development of the state. Fill in and mail the coupon to CALIFORNIANS INC., San Francisco, California.

A bit of downtown San Francisco's constantly changing skyline.

San Francisco — the Golden Gateway to California



In San Francisco's famous Golden Gate Park the municipal band plays out of doors all year 'round.

A home overlooking San Francisco Bay.

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They came, they saw, they stayed

—How thousands of newcomers feel about life in California is indicated by these typical excerpts from letters to Californians Inc. We can put you in touch with the writers if you desire.

To be able to motor for hundreds of miles without leaving the concrete was to us a revelation, and even now we enjoy a 50- or 60-mile drive just as much as ever. Moreover, these highways are a great help to us in our business. Our ranch, consisting of five acres of sandy loam soil, accommodates 3,000 hens.
W.F.D., PETALUMA

I have roses on my Christmas table from my garden, such as they pay a dollar apiece for in the East.

We can have all the beautiful scenery we want by just driving in the mountains on a Sunday. In every locality the scenery is different, so a person does not get tired of California.
MRS. I.E.M., ORLAND

We bought 140 acres and started with fruit farming. My husband, who was sick before, has become well. Our children have grown strong and healthy. All of us enjoy this sunny, health-giving climate.
MRS. A.F., LOOMIS

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United States battle fleet will maneuver here next April, May and June. Make steamer and hotel reservations NOW if you would visit the Islands then. Round trip may be made in 3 to 4 weeks from San Francisco, Los Angeles, Seattle, Vancouver or Victoria, B. C., allowing one or two weeks in Hawaii, for $300 or $400, covering all necessary expense.

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Sketched from life. Balcom, China, '24

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Golf date, picnic or sight-seeing trip scheduled for a week from Saturday or any day in the week?—sure you'll be there, and so will the sun!

But isn't it HOT?—well, the forty-seven-year average mean temperatures in a central city in this section (U. S. Weather Bureau figures, just so we don't mislead you) are 66° for June; 70° for July; 71° for August; and 69° for September.

Southern California, *a summer resort*—yes, natives are often asked, "But how do you sleep at night?" and the strange, calm, unexcited answer comes back—"Under blankets."

"Why, what a land!" You're right. What opportunity for pure, unadulterated FUN.

Golf, tennis, horseback riding, hiking, camping, fishing, ocean bathing, old missions and their history, deserts, mountains, orange, fig and olive groves, palms, eucalyptus, pepper trees and other vegetation and flowers such as you have never seen—and five thousand miles of beautifully paved motor roads threading through it all!

The Limited, with its hotel-like service, takes you through the historic lands of the old pioneers.

Come now or come this summer.

Special low round trip railroad rates from May to October.

Southern California is the new gateway to Hawaii. See it and enjoy it on your way.

Railroad ticket agents in any city have detailed information about California. Ask them, or mail coupon below to us.

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DEPT. 802, 2601 S. FIGUEROA STREET, LOS ANGELES, CALIFORNIA.

I am planning to visit Southern California this summer. Please send me your free booklet, "Southern California All the Year." Also booklet telling especially of the attractions and opportunities in the counties which I have checked.

- ☐ *Los Angeles City and County*
- ☐ *Orange County*
- ☐ *Riverside County*
- ☐ *San Bernardino County*
- ☐ *Santa Barbara County*
- ☐ *Ventura County*

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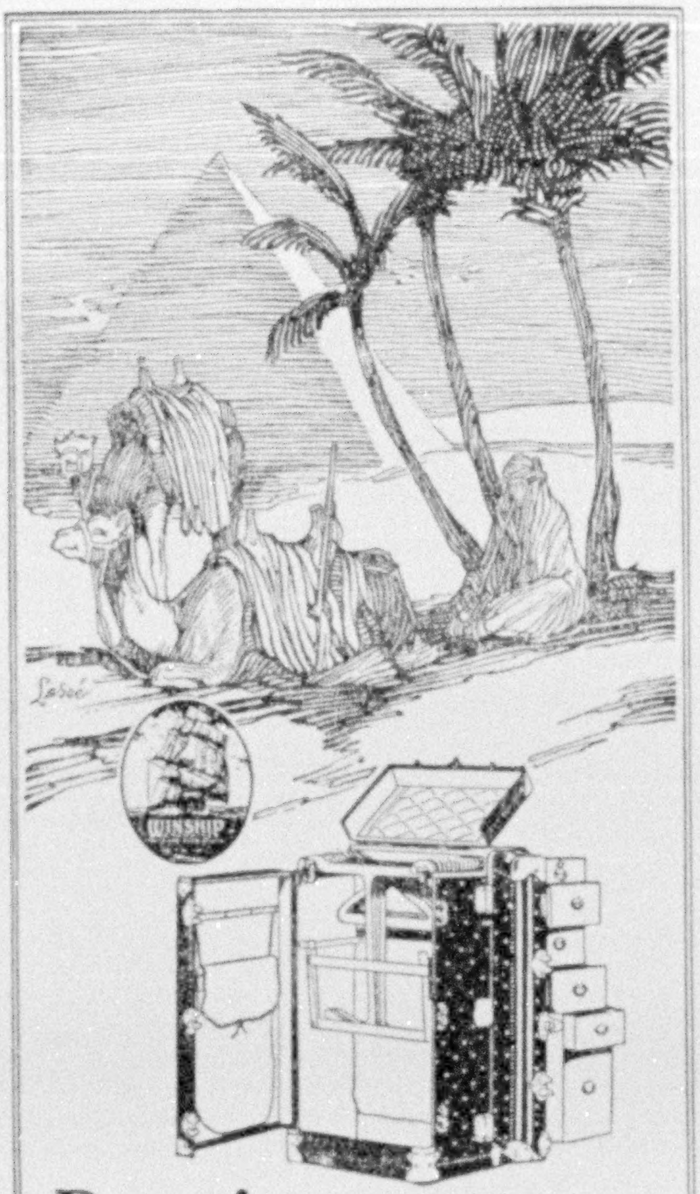

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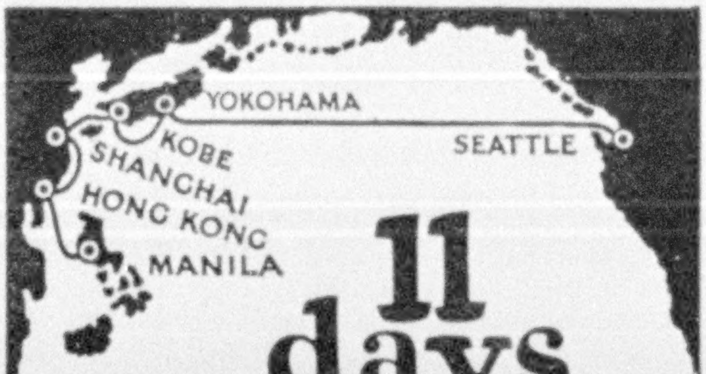

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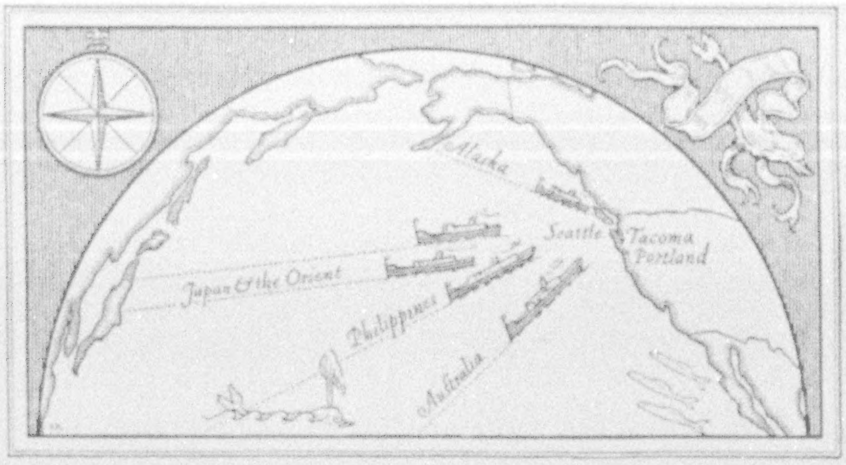

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Westward still the path of empire! Westward, this time, with new motives and a new impetus.

Across the Pacific twelve hundred millions of people demand goods and have the wealth to pay for them. A market undreamed of in all history rises swiftly in the Orient.

Two continents eye this market jealously. America competes with Europe for a mighty prize.

And America's greatest hope to win that prize is not through the Panama Canal, but through the ports of Washington and Oregon.

For these are her natural western gateway to the principal points of the world. Logically and inevitably, they are the future centers of her traffic with the East.

They mark, by several days, her shortest route to Asia and the important Oriental islands of the Pacific.

They are nearer by rail to America's fullest present industrial development than any other ports on the Pacific.

They are naturally endowed with harbor facilities that have cost other successful world ports millions of dollars to equal by artificial means.

And back of them, in the Pacific Northwest, comprising the states of Washington, Oregon, Idaho, Montana and Wyoming, are all the possibilities of a tremendous industry to support their growth:

- Half the potential water power of the United States
- Half its standing timber
- Oil wells and mines of coal and metals even now yielding more than a million dollars a day
- Farm crops, including half the world's commercial apples and one-sixth the country's wheat, to the value of more than 500 million dollars a year
- With Alaska, the world's greatest fishing industry, with fleets and canneries producing 100 million dollars a year
- Manufacturing enterprises the value of whose products has increased 804 per cent in twenty years

Already the great ports of the Pacific Northwest dominate our fast-growing Pacific Coast commerce. The foreign trade tonnage passing through them is more than double that passing through the ports of California.

These are the things that progressive American industrialists who seek new markets in the Orient are considering in all their plans for expansion.

For in the Pacific Northwest they find their greatest opportunity *now!*

Write today for our interesting booklet, "The Western Gateway to World Trade." Address: Chicago, Burlington & Quincy R. R., Chicago, Ill.; Northern Pacific Ry., St. Paul, Minn.; or Great Northern Ry., St. Paul, Minn.

THE PACIFIC NORTHWEST

The Chicago Burlington & Quincy R·R·
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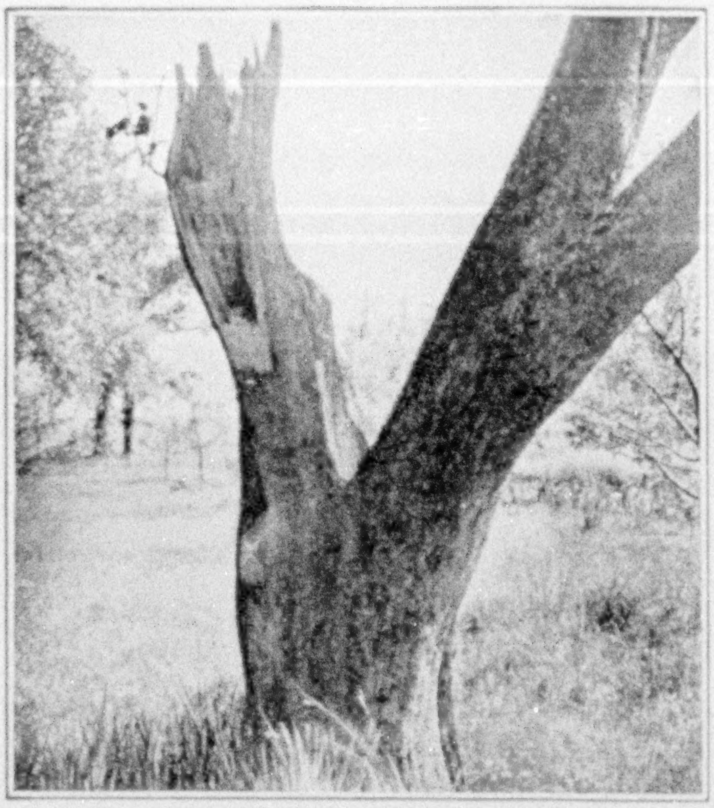

Neglect did this

This tragic result had its beginning in a small, innocent looking open wound on the side of the broken limb. Decay started, as it always does in open wounds, and ate its way until the limb was a mere shell and an inevitable victim of a windstorm.

What about your trees? You, as a layman, might easily miss the danger signals that would be apparent to a Davey Tree Surgeon. Neglect is both expensive and dangerous. Take care of these tree troubles in time—save your trees before they are too far gone. The local Davey representative will examine your trees without cost or obligation.

Davey Tree Surgeons are near you—anywhere between Boston and Kansas City, between Canada and the Gulf.

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Reg. U. S. Pat. Off.

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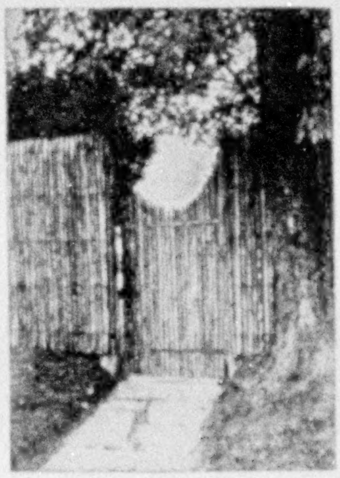

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Eat your ABC's

ACCORDING to the American Medical Association vitamins are constituents of foods essential to health. Three are known at present designated as Vitamins A, B and C. (see chart).

A deficiency of "A" in the diet may result in symptoms of rickets and a disease of the eyes as well as lack of normal development.

A deficiency of "B" may result in the loss of appetite and symptoms of a disease of the nerves called beri-beri.

A deficiency of "C" may result in symptoms of scurvy.

A deficiency of *any* of the vitamins in the diet of children will result in impaired growth and health.

Many physical ailments could be avoided by proper attention to food. Some "prepared" foods have been robbed of health-giving elements which Nature put in them.

Nutrition is an individual problem which varies according to age. For instance, the person of advancing years needs more "roughage" than a child—roughage in the form of whole wheat, whole cereals, bran or bulky vegetables and fruits.

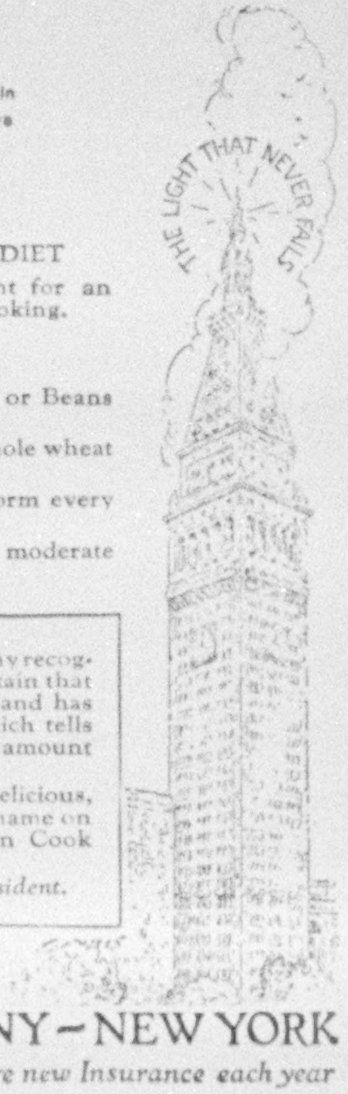
Variety in the diet is absolutely essential. The mistake that many people make is in neglecting to use enough milk, whole wheat bread, fruits, vegetables; also whole grain cereals from which the outer covering has not been removed—rice, wheat, oats, corn, barley—the *natural* foods in which vitamins and minerals are most plentiful.

Make no mistake—the most important health law is the law of keeping well by eating the right food.

Vitamins in Foods

	"A"	"B"	"C"		"A"	"B"	"C"
BREAD, WHITE (WATER)	?	+	—	TOMATOES (RAW OR CANNED)	++	+++	+++
" , " (MILK)	+	+	?	BEANS, KIDNEY	•	+++	•
" WHOLE WHEAT (WATER)	+	++	?	" , NAVY	•	+++	—
" , " " (MILK)	++	++	?	" , STRING (FRESH)	++	++	++
BARLEY (WHOLE)	+	++	—	CABBAGE, FRESH, RAW	+	+++	+?
CORN, YELLOW	+	++	—	" , COOKED	+	++	+?
OATS	+	++	—	CARROTS, FRESH, RAW	++	++	++
MEAT, LEAN	— to +	+?	+?	" , COOKED	++	+	+
BEEF FAT	+	—	—	CAULIFLOWER	+	++	+
MUTTON FAT	+	—	—	CELERY	•	+	•
PIG KIDNEY FAT	++	—	—	CUCUMBER	•	+	•
OLEOMARGARINE	+	—	—	DANDELION GREENS	++	++	+
LIVER	++	++	+	EGGPLANT, DRIED	•	++	•
KIDNEY	++	++	+?	LETTUCE	++	++	+++
BRAINS	+	++	+?	ONIONS	•	++	++
SWEETBREADS	+	+	•	PARSNIP	—?	++	•
FISH, LEAN	—	+	•	PEAS	++	++	+?
" , FAT	+	+	•	POTATOES (BOILED 15 MIN.)	•	++	+?
" , ROE	+	++	+?	" (" 1 HOUR)	•	++	+?
MILK, FRESH	+++	++	+V	" (BAKED)	•	++	+
" , CONDENSED	+++	++	+V	SWEET POTATOES	++	+	•
" , DRIED, (WHOLE)	+++	++	+V	RADISH	•	+	•
" , SKIMMED	+	++	+V	RUTABAGA	—?	++	+++?
BUTTERMILK	+	++	+V	SPINACH, FRESH	+++	+++	•
CREAM	+++	++	+V	" , DRIED	+++	++	•
BUTTER	+++	—	—	SQUASH, HUBBARD	++	•	•
CHEESE	++	•	•	TURNIPS	—?	++	•
COTTAGE CHEESE	+	•	•	APPLES	+	+	+
EGGS	++	+	+?	BANANAS	+?	+?	+
ALMONDS	+	+	•	GRAPE JUICE	•	+	+
COCONUT	+	++	•	GRAPEFRUIT	•	++	++
HICKORY NUTS	•	++	•	LEMON JUICE	•	++	+++
PEANUTS	+	++	•	ORANGE JUICE	+	++	+++
PECANS	•	+	•	PRUNES	•	+	—
WALNUTS	•	++	•	RASPBERRIES (FRESH OR CANNED)	•	•	+++

+ ··· contains the Vitamin
++ ··· good source of the Vitamin
+++ ··· excellent source of the Vitamin
— ··· no appreciable amount of the Vitamin
? ··· doubt as to presence or relative amount
• ··· evidence lacking or insufficient
V ··· variable



A WELL BALANCED DAILY DIET

1. Milk—a quart for a child, a pint for an adult—as a beverage or used in cooking.
2. Vegetables—Two daily.
3. Fresh Fruits—At least once daily.
4. Meat, or Fish, or Eggs or Cheese or Beans or Lentils.
5. Bread and Cereals—Preferably whole wheat and other entire grain.
6. Fat—Butter or other fat in some form every day.
7. Sweets—Best when taken in a moderate amount at mealtime.

Keep this page where you can refer to it readily for guidance. If upon your judgment depends the choice of food for your family, remember that you have their health in your keeping.

Good food is not necessarily expensive. The cheapest food is often most nutritious. The most expensive food is frequently harmful. The important thing is wise selection. Select your diet from the Vitamin Chart on this page so that the proportions of Vitamins A, B, C are equally well balanced.

The Metropolitan Life Insurance Company recognizes the great importance of making certain that good food is not spoiled in the cooking and has prepared a practical new Cook Book which tells how to prepare food to obtain the greatest amount of nutriment.

This book, containing hundreds of delicious, economical recipes, is free to all. Your name on a post-card asking for the Metropolitan Cook Book will bring it by return mail.

HALEY FISKE, *President.*

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Sampler
& Confections

Vol. XLVII, No. 2 WASHINGTON February, 1925

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CAIRO TO CAPE TOWN, OVERLAND

An Adventurous Journey of 135 Days, Made by an American Man and His Wife, Through the Length of the African Continent

By Felix Shay

SINCE the previous spring, Porter Shay and I had been adventuring from the high Inca-Andes to the plains of Mongolia, from the South Seas to the border of Afghanistan. We completed our tour of India in the intense heat, in the midst of an outburst of plague.

The English newspapers brought on board the P. & O. Steamship *Mantua* at Bombay were full of the wonderful discoveries by Lord Carnarvon at the tomb of Tutankhamen. Half the deck and dinner-table conversations were given over to that subject. The presence on board the ship of Lady Porchester, the wife of Lord Carnarvon's son, gave pertinence to the inspired gossip. We Americans were especially interested, for Lady Porchester is an American girl.

EXPERTS SAID THE TRIP WAS IMPOSSIBLE

The odd and curious tales told about Lord Carnarvon, about Egypt, about Africa, stimulated old desires to see inside Africa. There we were, world-weary and travel-tired, with Paris and a chair on the boulevards in sight, deliberating on an unpremeditated jaunt to another of the "out places."

Perhaps we were a little sun-touched. Perhaps the "out places" call to us more than do the boulevards. I only know we discussed Central Africa seriously and enthusiastically while the ship moved with caution through the Suez Canal toward Port Said.

That night on board we submitted our proposition to the council of friendly colonels whose life work it is to keep the British Flag flying where the sun never sets.

"Into interior Africa without equipment, supplies, or guns? Cairo to Cape Town overland? Oh, I say, you cawn't do that, Old Chap! Besides, it's the wrong season. You cawn't travel Central Africa in the summer. Have an iced drink instead!"

In America two years before I had sought information on the general subject of the Cairo-to-Cape-Town Route overland. I addressed an endless number of letters and inquiries, and was directed and redirected here and there, to no purpose. When I completed my inquiry, Africa was still the "Dark Continent" to me.

So it was the morning we anchored in Port Said.

FIVE THOUSAND MILES TO THE CAPE AS THE CROW FLIES

In spite of all the uncertainty, all the scoffing, all the jesting, we leaned over the rail and smiled at the gesticulating Arabs in the little boats—smiled at them and at each other. Maps or no maps,

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PASSING THROUGH THE SUEZ CANAL

This famous waterway has been called the "jugular vein of the British Empire." During the World War Germany attempted unsuccessfully to cut the "vein" by sending submarines to wait for ships near the long channel through the shallow shore waters natural to this part of the Mediterranean. The Suez Canal is 100 miles long, in contrast to the 40-mile Panama Canal. It is a sea-level canal, having no locks. Until 1923 the traffic passing through it exceeded that handled by the Panama waterway. In that year, however, the American canal's shipping exceeded that of Suez by 2,000,000 tons.

equipment or no equipment, we were going to Cape Town *overland* through Central Africa (see map, page 128).

Decisions like that make themselves.

Some people know one part of Africa; some another; but to meet one who had traveled the full distance from Cairo to Cape Town overland was not to be numbered among our pleasures.

Authorities in Port Said and Cairo advised me: "This is the rainy season. You will run into sandstorms in the desert, floods in the Sudan and Uganda, and you will have to walk at least 400 miles, much of it through the deadly tsetse-fly, or sleeping-sickness, country. Don't try it with a woman. You will never get through."

From Cairo to Cape Town is some 5,000 miles as the crow flies. As one travels the way one must travel, the route totals twice the distance from New York to California. Transcontinental railroads in Africa are figments of the fertile imagination. Cecil Rhodes' All-Red Route is still but a red line on the map.

The ticket agencies in Port Said were able to sell us railroad tickets to Khartum, in the Sudan, beyond which a boat operated on the Nile, but they were uncertain as to whether or not it was able to move at that season of the year, because of low water and sand bars in the river. They recommended that we wait until the following winter before making the experiment.

Instead, we booked for Cairo and Khartum.*

THE START FROM CAIRO

Cairo is no longer an Eastern city. It is a cosmopolitan city with a strong French flavor. The English until recently occupied Egypt, but the French have captured the Egyptian imagination. They say when a good Egyptian dies he goes to Paris.

The first morning our dragoman took us to the Sudan agent's office. There two kindly gentlemen displayed genuine interest in the proposed trip. They sincerely tried to help us. For an hour we were permitted to study maps and routes through the Sudan and Uganda. We came away full of confidence for the first lap of the journey.

They gave us a special Sudan Permit, which is necessary for those who plan to enter that country.

Then we called on the Belgian Consul to secure a visé for the Belgian Congo, and at the British Consulate for visés for Uganda, for Kenya, for Tanganyika, for Rhodesia, and the Union of South Africa.

That afternoon, on the terrace at Shepheard's, we sketched an arbitrary route on the map and presumed to put on paper a theoretical schedule, according to the best available information. The schedule indicated that we should arrive in Cape Town in 73 days. Ultimately we arrived in Cape Town in 135 days.

A NIGHT'S RIDE BY SLEEPER FROM CAIRO TO LUXOR

Cairo was a familiar scene to us, so we moved south the second day. The train with the International sleeper left Cairo at 8:30 p. m. for Luxor. It arrived at 9 the next morning.

At Luxor we crossed the Nile in a small Arab *dhow*. The donkeys were waiting on the far side to take us to Tutankhamen's tomb.* Off we jogged along the embankments that separate the fields where the fellaheen work.

When the donkey boys learned we needed no assistance, they linked arms like three dusty musketeers and followed after, singing Arab songs in a high, wailing, monotonous voice.

The fellaheen, cultivating only the banks of the Nile and the flats which benefit by its overflow, farm as they did in the days of Mohammed, plowing with bent sticks and irrigating their fields with water raised from wells by camels hitched to a kind of spindle and water wheel. Bullocks, driven around in a perpetual circle, tramped and threshed the grain as in Biblical times.

We rode toward the historic hills. Nor did we hurry, because the ride in the warm, clear air, in the bright sunlight, was a joy in itself.

Along the path unwashed children, with

* See also in the NATIONAL GEOGRAPHIC MAGAZINE "Along the Nile, Through Egypt and the Sudan," by Frederick Simpich, October, 1922, and "The Barrage of the Nile," by Day Allen Willey, February, 1910.

* See also "At the Tomb of Tutankhamen," by Maynard Owen Williams, in THE GEOGRAPHIC for May, 1923.

FISHING BEHIND DE LESSEPS' BACK AT PORT SAID

The gigantic statue of de Lesseps looks out upon the parade of commerce this French engineer's vision and energy made possible.

Photographs by Maynard Owen Williams

HUMAN CONVEYOR BELT AT PORT SAID

A temporary hitch has occurred in coaling a ship. But hitches do not last long. The queues of natives at Port Said, carrying coal cheaper than machinery can do it, add weight to Kipling's lines, which put the Orient "somewheres east of Suez."

Photograph by Maynard Owen Williams

AN AMERICAN IMMIGRANT STRUTS IN AFRICA

Proudly surveying Port Said, a turkey gobbler stands untied on his pedestal of a native poultry-seller's crates while a jury of citizens from time to time passes upon his worthiness to die. Another immigrant from the Americas, the peanut, has penetrated innermost Africa more easily than explorers. Durra flour, from a cereal grass, and "goobers" are a staple diet for millions of natives. Though popular in America and Africa, peanuts are eaten only by the poor in Europe.

the limpid eyes of Arabs, put out dirty little hands to us and begged *baksheesh*. We waved at them and answered with an Arab greeting. Many of them had black woolly lambs in their arms as pets.

Cynics say the first word an Arab baby learns is "baksheesh."

In color these Arabs range from coal-hole black to taffy yellow. From Luxor to Khartum the Arab and the Negro have become a blend.

The hills beyond the Nile are of barren, crumbly rock. Sand blows over all and submerges all. Where water touches Egypt, there is a garden; where no water touches, a barren waste, desolation itself.

Our road led through cane fields and watermelon patches.

These cane fields make fortunes for the fancy-dressed Egyptians who frequent the sidewalk coffee shops in Cairo. One year's return from the crop repays the original investment; thereafter the income from the fields is a gift from Allah.

To attract our favorable attention, the donkey boys repeated time and again, "All right! Good morning! Day not hot! Nice day! Americans nice people! Hip, hip, hooray!" They had to run all day to keep up with us, and for all their good humor, their work was trying. There was more than enough dust, which blew full in their faces, causing frequent fits of coughing. We encouraged them to take short cuts across the fields to escape it.

Gaunt Arabs passed on tiny donkeys, riding astride, without stirrups, their sandaled feet turned out at right angles (see page 141). Groups of barefooted Mohammedan women, swathed in blue cotton, returning from the Nile with water jugs on their heads, padded by.

IN THE VALLEY OF THE KINGS

The Valley of the Kings is a crater-like depression behind the first range of hills. The walls are of limestone rock, steep and abrupt. For centuries the sand

Drawn by A. H. Bumstead

A MAP OF AFRICA SHOWING THE AUTHOR'S ROUTE FROM CAIRO TO CAPE TOWN

The dream of Cecil Rhodes—a railroad from the mouth of the Nile to the Cape of Good Hope, through British-controlled territory—is still very much of the substance of which dreams are made. It took Mr. and Mrs. Shay 135 days to make the trip overland, traveling by river and lake boats as well as by train, and bridging many gaps on foot through tropical regions. For greater detail see the National Geographic Society's New Map of Africa (size, 32 x 28 inches), in six colors, issued as a supplement with THE GEOGRAPHIC for October, 1922. Separate copies are obtainable from the headquarters of The Society, on paper, at $1 each; linen, $1.50.

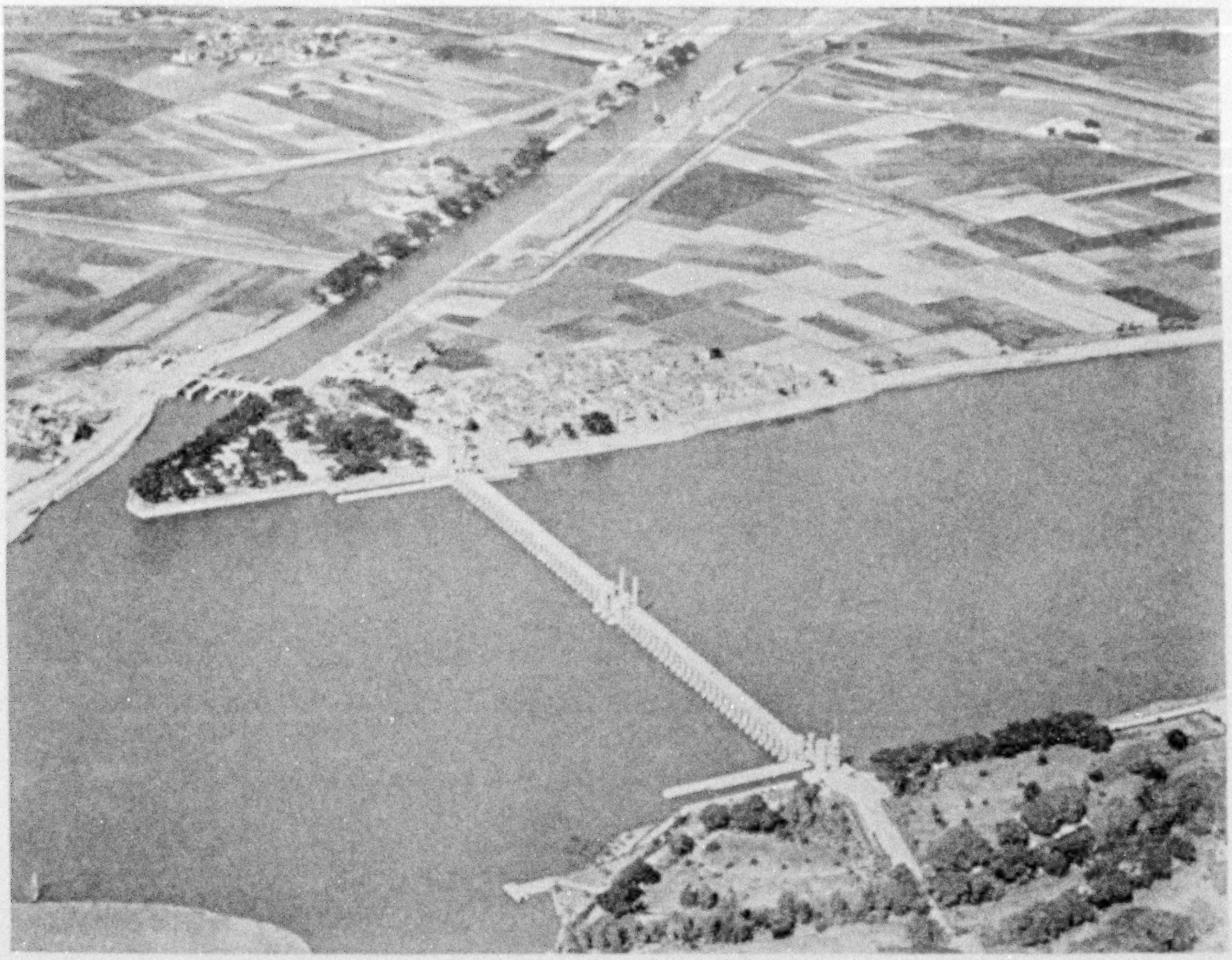
of the desert swept down over the rim of the valley and in places almost filled it.*

Most of the tombs of the ancient Egyptian kings in the side wall, which have been exposed by excavation, are on the same level, but Tutankhamen's is on a lower level, directly under the tomb of Rameses VI.

* See also in the NATIONAL GEOGRAPHIC MAGAZINE for September, 1913, "Reconstructing Egypt's History," by Wallace N. Stearns; "The Resurrection of Ancient Egypt," by James Baikie, and "The Sacred Ibis Cemetery and Jackal Catacombs of Abydos," by C. M. Cobern.

Italians, French, English, Americans—men of many nations—have made discoveries in this valley, but the tombs of most of the kings were robbed long years before, and much of the incidental treasure was stolen. Even the walls of the tombs were ruthlessly mutilated by the vandals, the hieroglyphics being cut out in blocks and sold to unscrupulous dealers and collectors.

The Arabs stole; collectors and dealers bought. The Arabs say, "The antiquities belong to him who finds them!"



Photograph by J. Blackburne

AN AIRPLANE VIEW OF ONE OF THE NILE BARRAGES

Dams are used to conserve water, barrages to direct it. Several barrages have been built across the Nile to send its flow into irrigation canals. Fifteen miles below Cairo a barrage has been constructed to control the water level in the Nile Delta, as an aid to navigation as well as to agriculture.

The opening into the tomb of Tutankhamen is in the floor of the valley. When we arrived it was covered over and walled in, with the tent of the Egyptian soldiers detailed for guard duty five yards away. A narrow-gauge railway was being transported in sections on camels' backs and deposited near by. Other camels were bringing stout little steel-wheeled baggage trucks to remove the treasure from the tomb.

Closed, the tomb of Tutankhamen appears to be simply a stone wall with some loose dirt before it. Open, it is exactly like the near-by tombs, except that it was the resting place of a monarch rich in the accouterments of death and had escaped the depredations of grave robbers.

The find was valuable because it revealed an authentic chapter of Egyptian history, unaltered and undefiled. To the scientific mind it represented the reward of a life's work, a hope fulfilled. To the lay mind, the tourist mind, it was another place to go and gaze upon. To the hotel-keepers, shopkeepers, and dragomen of Egypt it was, and is, the chance that comes once in a generation.

GAZING UPON THE CALM COUNTENANCE OF ONE OF THE PHARAOHS

In one of the royal tombs we saw the mummy of a king, Amenophis II. We gave the Arab guard a little baksheesh to find a secret way into the walled-off chamber. We had to scramble down into the dark, where there were no stairs, to a lower level, with only a candle for light—like slipping and falling into a grave.

At the bottom, in a small stone room, was a huge sarcophagus. The king lay, with the calm dignity of death upon his face, his shoulders and chest exposed, a

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THE SUGAR-CANE MARKET NEAR HASAN MOSQUE, CAIRO

Scientific irrigation has led to increase of Egypt's sugar-cane crops, particularly south of Cairo. An inferior sugar cane, introduced from India, grown throughout the length of the Egyptian section of the Nile, is a native equivalent for chewing gum. Hasan Mosque, like many other minareted mosques in Cairo, is a combination church and school.

single garment draped around his lower body in graceful folds. "Mummy" is not the word! There lay a man. The preservation was perfection itself, though he had been dead some thousands of years.

His skin was blue-black. Whether that was the life color, I am unable to state, but I presume it might have been. Of a certainty, the Egyptians of old who lived in this Luxor-Khartum climate were not white men. The intense sun rays would have attended to that.

He had finger nails almost an inch long, and the hands were thin and finely drawn. His lips were a little too full for a white man's, but the nose was aquiline and high.

A VISIT TO THE SOCIAL CENTER OF QUEEN HATSHEPSUT, THE "BLUE LADY"

We climbed up the steep side walls, from the Valley of the Kings, to meet our donkeys, silhouetted against the sky, and went to the resthouse for luncheon.

Later, in the cool of the afternoon, we visited the ancient social center of Queen Hatshepsut, who might be called the Blue Lady because she made famous the blue glaze, so distinctive among Egyptian antiquities.

Porter saw a blue bead in the ruins. She said not a word to me, but searched until she found five more. Think of it! Six ancient Egyptian blue beads found by one's self! Do not the Arabs say, "The antiquities belong to him who finds them"? So she put them in her pocket. Then she searched some more, and presently she found three *green* beads and four *red* ones. But Hatshepsut favored only blue! The find proved to be glass beads off a very modern donkey's fly brush!

Soon we headed the donkeys toward the Nile. We passed Arab farmers, who greeted us with "Salaam, Sahib," and we replied "Salaam." We met Arab women, too, who did not cover their faces; working women cannot be bothered.

In Cairo all the Mohammedan women cover their faces—the ugly ones with black knitted veils and the pretty ones with sheer white chiffon, which reveals the face clearly and endows it with a glorified complexion.

Another day we visited the tombs of the lesser personalities; another, Karnak; another, we reviewed Luxor itself.

THE SUN'S GLARE STRIKES LIKE A BLOW IN THE FACE

The fourth morning, in a little white train, with blue-glass windows to lessen the shock of the rushing sunshine, we moved on toward Khartum through the desert.

Before we were a mile from the station at Luxor the desert began to assert itself. The temperature in the coach climbed to almost unbearable heights; yet when we opened the window for what we thought would be a breath of fresh air, the glare of the sun struck us like a blow in the face. We had never conceived of such violent sunshine.

Where it is hot—*hot*—people make friends quickly; no formalities or conventionalities seem worth while. So we soon learned to know the half dozen white men who were our fellow passengers.

The sun became hotter, the ride grew dustier, the desert became more and more like a desert. Outside the windows there was nothing but sand and heat and sunshine; inside, only heat and sand.

Occasionally we stopped at a railway station set in the waste. Voluble Arabs made the usual din, apparently about nothing.

Late in the afternoon we reached Shellal and transferred to a boat on the Nile for Halfa, whence stretches the railway to Khartum, completed by Kitchener between 1897 and 1899, when he made war on the forces of Mohammed Ahmed, the "Mad Mahdi," concentrated at Omdurman.

A VARIED GROUP OF PASSENGERS STARTS NORTH ON THE NILE

The Nile trip from Shellal to Halfa lasted from 5 o'clock one afternoon to noon of the second day. The boat was too small to permit the passengers to move about. There was nothing to do but sleep and eat, read and talk.

On board were two English engineers coming out to the new Blue Nile Dam above Khartum, which is to bring another million acres of land under irrigation for the cultivation of cotton; an English railroad man who had spent many years in the country; a physician from the English hospital at Omdurman; a Syrian physician bound for a sleeping-sickness area up south; an Arab-Egyptian official going back to his tropical post. Two itinerant Americans completed the boat's company.

For half the distance to Halfa the desert was saffron-colored, sienna, burnt orange; in the high light of noon it was golden.

Most of us think of the Sahara as composed of white or gray sand. To the contrary, it is colorful. Often the "sand" is broken rock, and there are many ledges and ridges. Everywhere the ground heaves and swells.

HALF THE DESERT ARABS SEEM TO HAVE SORE EYES

The desert Arabs live in desperate squalor, on the fringe. On what they subsist is more or less a mystery. The hot sun burns up their filth; otherwise they must of necessity all die. The Nile flows close by, but it is not used for bathing. Half the inhabitants seem to have sore eyes, and the sightless ones are everywhere.

Evidently the desert flies have been educated. To tell a fly, "Go away," means nothing to it. Always the Arabs were covered with contented flies. We shooed them away. They ignored the warning. They stayed where they were until they were killed. It is no simple matter to attempt to kill all the flies in the Sahara.

The heat in the cabins of the small boat was almost unendurable, so we turned out at daybreak and went on deck to breathe.

We saw the sun rise over the desert. A huge brassy disk slid into place with astonishing rapidity. One moment there was a soft haze; the next, a bright, hot sun assaulted the land.

Along the shore small palm trees grew delicately out of the water itself and gently waved green branches at us. Off

© Donald McLeish

A KORAN CLASS ON THE STEPS OF MUAYYAD MOSQUE, CAIRO

After they have learned the alphabet and how to count, instruction among Moslem children is confined almost entirely to the precepts of the Koran. Cairo is the educational center of all Islam. El Azhar University, probably the oldest in the world, in prosperous times has over 10,000 students. The course can be completed in 17 years, and after passing the final examination a diploma entitles the holder to teach there or in any similar institution. The students of this institution have been active participants in the recent political unrest in Egypt.

toward the horizon were hummocks and pyramids of crumbly rock. Near at hand an Arab mud village slept soundly and odorously.

Swarms of wispy gnats moved down from nowhere to settle in our hair for additional warmth.

The steersman, a Mohammedan, came out of the little deck house to say his prayers on the roof of the lower deck.

It is the season of the Feast of Ramadan. He faces Mecca. He stands. He lifts both gaunt hands. He drops his hands. He bows. He kneels. He prostrates himself. He lays his forehead to the deck. He repeats.

HOW THE ARABS LOST A CONTINENT

We were reminded of the conquests of the Arabs. They conquered the "Sudan" (Arabic for the "Country of the Blacks") and most of Equatorial Africa as well. Had they ruled kindly, Africa probably would have belonged to them. Instead, they used the continent as a reservoir from which to draw slaves.

We were not yet accustomed to hearing white men prattling in Arabic, a Semitic

language, the sound of which is very distinctive, but already we were beginning to "hear" separate words when they were spoken, and in a few days were able to indicate in Arabic to the serving boys what was wanted.

Each language seems to have its different set of gestures, and Arabic has more than Yiddish. Out on the shore we could tell when a European began to speak in Arabic, for immediately he brought his hands, arms, and shoulders into the conversation.

At midday the heat was so enervating that we would sit and eat in silence. Those of us who were new to the country ate very little.

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A NUBIAN WOMAN SELLING FRUIT IN CAIRO

Her costume is set off with a necklace of coins. During the World War much gold went up the Nile Valley for cattle and supplies. Bankers know it has not come out, and much of the gold, no doubt, forms the crowning glory of native gala costumes. Arab influence can be traced throughout the world by fruit. Isolated gardens of fruit trees in settlements on the Cape-to-Cairo route are the chief reminders that these places were stations for Arab slave raiders.

THE SUDAN IS A COUNTRY OF CALAMITIES

We asked one of our physician passengers if the Sudan were a prosperous country.

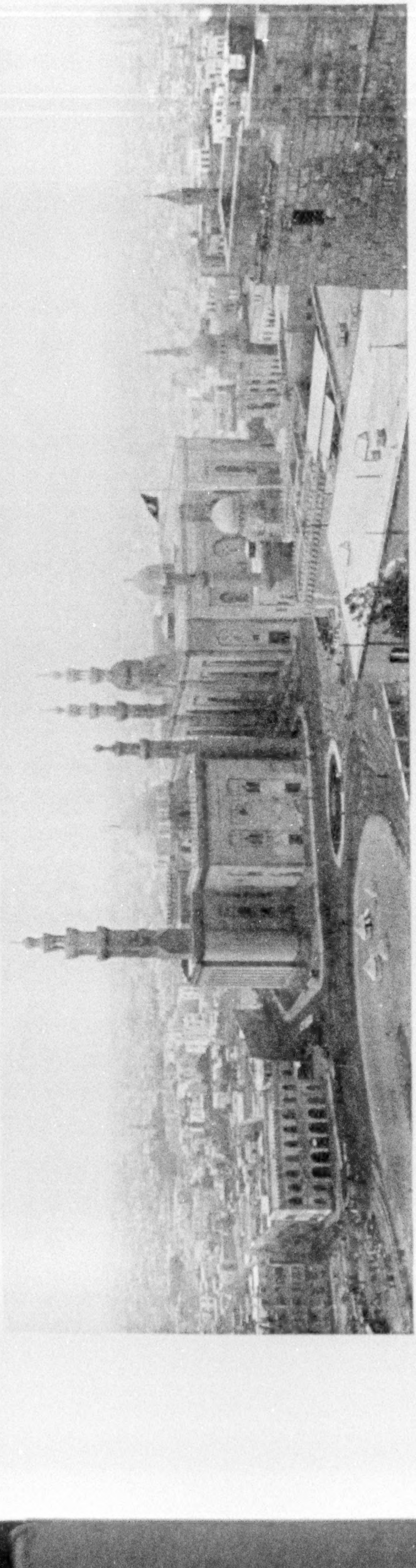
"Yes, on the face of it," he replied, "but a country of calamities. One year there is no rain. The next year we have a flood which washes away everything. A third year we have famine. Then the natives say they are bewitched and steal off into the jungle and refuse to work. One year we have malaria, and the next, sleeping sickness."

These doctors are literally giving their lives to save the black man from savagery and ignorance and disease. Only the lucky ones are likely to come out of the Sudan alive at the end of their period of voluntary servitude. When one dies, another comes in. Their salary is a pittance.

Medical missionary work yields about 100 per cent results.

At first the natives were afraid of the "medicine man" from civilization; but once their confidence was gained, the sick, the halt, and the lame crowded the hospitals.

In these back countries all white men are supposed to be doctors, which is a subtle tribute to the medical profession.



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THE GREAT MOSQUE OF CAIRO AS SEEN FROM THE CITADEL

The metropolis of the Nile and largest city in all Africa does not trace its origin to the ancient Egyptians, but to Arab invaders. Its rise came not by chance, but by the strategic importance of a site at the Nile Delta head giving command of the river and trade routes east and west. Cairo spreads itself on the level plain between the east river bank and the hills.

All down through Africa we had a multitude of savages come to us with tragic and terrible ailments and ask us to cure them.

A PANORAMA OF HISTORY ON THE BANKS OF THE NILE

The only animals we saw in the desert were lean white camels. They browsed and grazed, apparently on nothing, or reclined on shadeless sands hot enough to burn the skin from one's hands.

The banks of the Nile are a panorama of history. We passed Philæ, the ancient shrine of Isis, which since the building of the Aswan Dam is submerged almost half the year. We passed a Roman fort high on a rocky and desert shore, set there to watch over the barbarians while Antony's romance with Cleopatra flourished. We passed a temple supposedly erected by Cleopatra herself—in a fit of remorse, we presumed to think.

When we came to a Temple of the Sun, carved out of rock, we were given an opportunity to land, and we entered its cavernous depths at night with torches that threw weird shadows.

We passed Kitchener's camp, where the great British soldier spent something like three years equipping an army with machine guns and artillery to go into the Sudan to subdue a religious zealot and his fanatical followers.

THE TRAIN SURRENDERS TO A DESERT SANDSTORM

The train from Halfa to Khartum was scheduled to leave at 1:30 p. m. one day and to arrive at Khartum at 4:00 the next afternoon. We arrived at our destination 18 hours late, having been marooned an afternoon and a

night in the desert with masses of sand hurtling over and around us.

During this sandstorm we rested at Number 6. These desert stations are numbered, thus adding the one touch necessary to complete their desolation.

We did not dare to go forward, for when these desert storms swirl often they blow the roadbed out from under the crossties and leave the rails suspended in the air, like bright steel ribbons. Eventually, before the full train was permitted to proceed, a hand-car had to be sent ahead as a scout to see if all were well.

It was late in the afternoon when the full force of the sirocco struck us, turning the daylight to darkness.

We were fascinated by its approach. Thin, angular Arab figures danced in its path, like grotesque scarecrows, trying to escape. It whirled across the Nile, striking us broadside on, and for a few stuffy minutes the air was unbreathable.

The storm carried all the sand and scenery with it. For a half hour we breathed dust, swallowed dust, and spat dust. Then it passed over, and we could watch it playing havoc on the horizon.

Late in the evening, when the moon came out, we sat on the bank of the Nile and exchanged experiences till long past midnight.

One man said, "When the World War was on, the black Sudanese sold cattle and foodstuffs in large quantities to the Allies. They were paid in gold, thousands of pounds of it. This gold has never been banked. It went into the Sudan back country and disappeared. What the natives did with it no one knows; perhaps they buried it. But the bankers know what they did not do with it; they did not bank it."

THE CITY WHERE KITCHENER WON FAME

Khartum was a welcome sight!

Luxor, Aswan, Halfa, Omdurman, and Khartum are river-bank villages. Because of their fame, one thinks of them as cities. Khartum plays at being the capital of the Sudan; Omdurman, just across the Nile, is an all-mud native village covering a vast area.

At Omdurman "Kitchener of Khartum" defeated the Kalifa, the successor to the Mad Mahdi.

The Anglo-Egyptian Sudan proper is a country of 1,000,000 square miles, one-third the size of continental United States, with an estimated population of 6,000,000.

Some day the Sudan will be a great cotton-growing land. England looks to it ultimately to supply the cotton she now buys from the United States. To-day England holds the Sudan with a skeleton organization against the exigencies of the future.

BUYING EQUIPMENT AT KHARTUM FOR OUR LONG TRAMP

Khartum is 1,000 miles south of Cairo. This was the frontier, the end of civilization. There was still equipment to buy!

The little boat pointed up the Nile was not due to sail for eight days. These were given over to a miscellaneous shopping expedition that took us into half the bazaars of Khartum, into private dwellings, into officers' quarters, into Arab godowns and up a multitude of alleys.

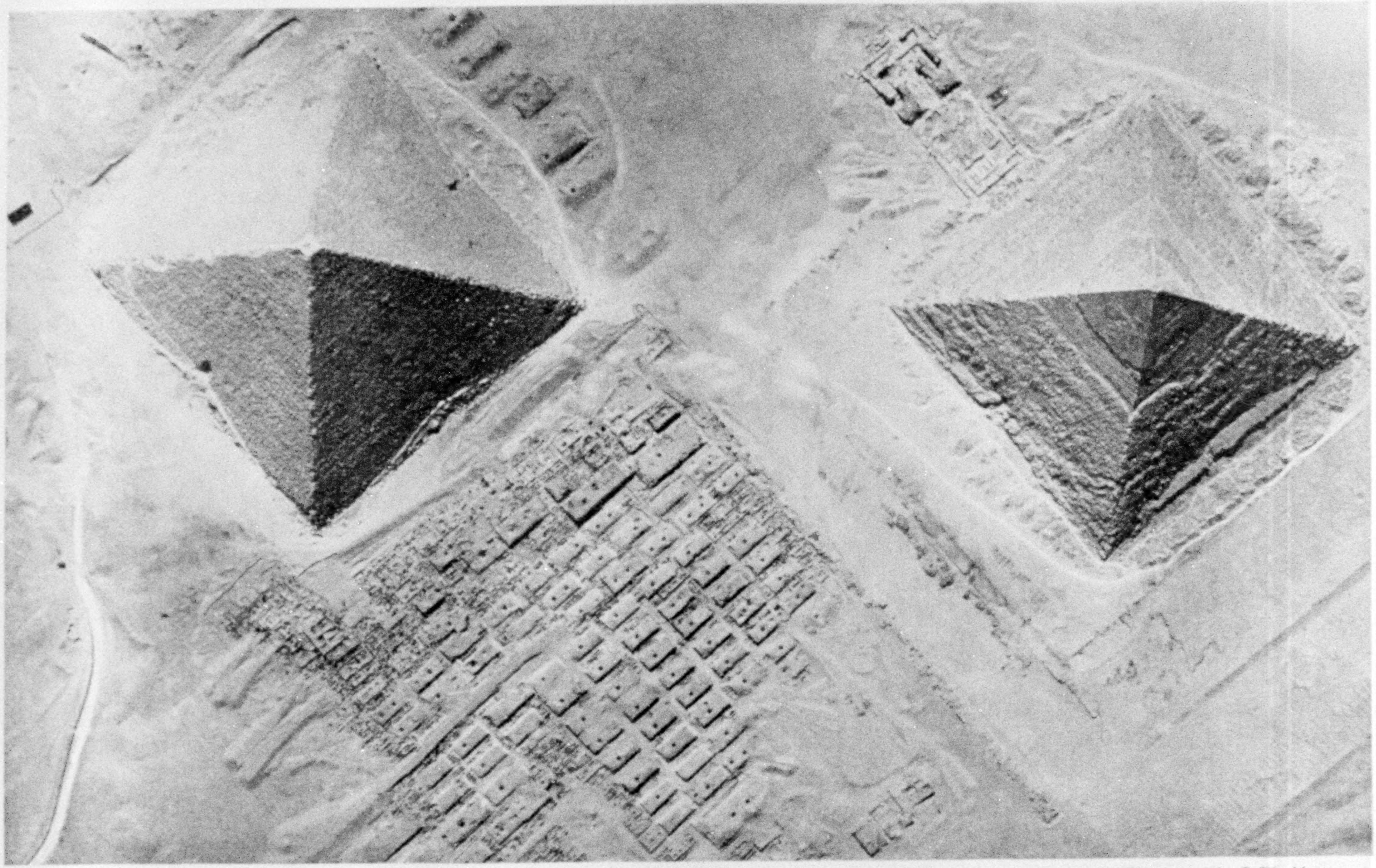
We needed a tent, camp beds, mosquito nets, mosquito boots, cooking utensils, rough clothing, medical stores, colored goggles, food supplies, and what not. Through our acquaintances of the train we met many white men. These good fellows constituted themselves a volunteer committee to find what we needed at the lowest possible prices. They interpreted for us, selected for us, and haggled for us.

Eventually we secured the necessary equipment and supplies. But we were unable to engage an English-speaking black boy who would venture with us up south.

The officials in Khartum advised us that the walk from Rejaf to Nimule was approximately 90 miles; there would be shelters provided by native chiefs along the way. They assured us that the *mamour* (a district official) at Rejaf undoubtedly would be able to outline the route and provide black carriers. They insisted that I carry some sort of firearm; so I purchased a high-caliber revolver.

Thus equipped, we were ready for the boat. But, inasmuch as the boat was not yet due to sail, there was a chance to explore Khartum and Omdurman.

Late afternoons we rode donkeys along the Nile, past the palace of the Governor-General, where Gordon was killed by the Mad Mahdi's men, toward the statue of



Photograph by J. Blackburne

THE PYRAMIDS SEEN FROM AN AIRPLANE

At the left is the Great Cheops Pyramid, one of the seven wonders of the ancient world. Beside the Second Pyramid can be seen skeleton outlines of the mortuary temple from which a causeway led down the plateau to the Nile. Remains of the limestone cap on the Second Pyramid can be clearly seen. Tombs of nobles, commanders, and engineers attached to the court stretch in rows between the pyramids. In one of the Mastaba tombs once lay the body of Khufu-onekh, chief architect of the Cheops Pyramid. Mastaba is Arabian for "bench," the term applied to the rock burial chambers because they resemble benches in modern Arabian bazaars.

Gordon sitting on a camel, looking out across the desert (see page 150).

The doctors at the Omdurman hospital, who are doing a wonderful work among the natives, invited us over for a day. Here were many pathetic sights. As we walked through the wards, we observed old black women, as gentle as the "mammies" of our own Southland, who insisted on kissing the hands of the doctors as they stopped to inquire about their progress.

A DRAMATIC PRAYER IN A HOSPITAL

One experience in this hospital very much impressed us. A physician, who was also a Doctor of Divinity, came into a convalescent ward and said: "My friends, such and such a black boy is to be operated on this morning, and he may die. I think we all ought to pray to God to let him live."

Christians, Mohammedans, and poor tribal blacks prayed aloud together, each in his own fashion, for the life of that black boy. Somehow, I felt that this was good missionary work.

After Omdurman we visited the tomb of the Mad Mahdi, which is dismantled. Kitchener feared it would become a shrine, for holy places are very dear to the Mohammedan mind. It is easy to establish a shrine; after a while it becomes holier and holier, and eventually may develop into a disturbance center. Even to-day, as the sun sets, the faithful creep inside the inclosure to pray at the empty tomb, and while we were there veiled women knelt in the dust outside, for it was the season of Ramadan.

The Gordon Hotel, where we stayed, faced on the public square, perhaps a hundred yards across. There was no grass. There was only sand. Step out into this square under the midday sun without one's pith helmet and one may have a sunstroke before he takes a hundred steps.

A short time before our arrival a Greek trader attempted to cross the square at noon on a rush errand, without his topee. He was stricken and died before he reached his destination.

While we were there the noontime temperature averaged about 115 degrees. The peculiar actinic rays of the sun played tricks with one's eyesight and smoked glasses were a necessity.

So frequent and so violent are the sandstorms in April and May that the Gordon Hotel has ceased trying to combat them. They blow through the window casings and scatter sand over the rooms and the corridors.

With evening came relief. A gentle breeze blew from the Nile and we sat on the earth terrace in front of the hotel from dinner until midnight, drinking lemon squashes and whiskeys-and-sodas. All the wit and wisdom gathered there; French, Germans, Swedes, Arabs, English, Syrians, Jews, Greeks, Italians, and two Americans fraternized. We exchanged banter and views. We were not very serious; one seldom was in that company and climate!

SOB AND BOOM OF TOM-TOMS IS HEARD ALL NIGHT

Off across the square, tom-toms beat perpetually and white figures of dervishes danced to the wild music. During Ramadan, every day is a fast and every night a festival.

A delegation went over to watch the show. Three musicians shuffled backward in a perpetual circle. They thrummed tom-toms—shallow hoops with skin stretched taut across. They sang; they chanted.

From time to time figures broke away from the tightly packed mob which inclosed the torches, and danced furiously, whirling after the manner of dervishes. Around and around they went, barefooted fanatics, leaping and gyrating in their long white robes and odd white turbans. One minute they struck a self-appreciative pose and held it; the next, they were in a frenzy again. They resembled nothing so much as chickens with their heads cut off, fluttering in the purposeless dance of death.

Each night we heard the sob and boom of the tom-toms lasting into the dawn.

We discovered the American Negro's love for watermelon is a hereditary influence. All these black people were excessively fond of melons. To the Sudanese they were food, drink, and refreshment, all combined.

FOUR "GEOGRAPHICS" ADDED TO EQUIPMENT

One morning we remembered that no seasoned traveler ever goes into Africa

Photograph by International

REFLECTING 5,000 YEARS OF HISTORY

The Pyramid of Cheops, across the river from Cairo, has a splendid setting—a plateau for a pedestal, the western sky for a "back drop," and the Nile to mirror its majesty. On the level mud plain, where turbaned Arabs now herd their flocks, once thrived for a few centuries a capital of Egypt. With the exception of a few scraps of masonry, the only remains of that city are the massive pyramids, tombs of its kings.

without a Book Shelf of Inspiring Literature to read between adventures. We had a family discussion. Porter suggested something light and something French, while I held out for "Pilgrim's Progress" and "Holy Living" and "Holy Dying," by Jeremy Taylor. We went to the bookstore and compromised on four ancient copies of the NATIONAL GEOGRAPHIC and a thumbed issue of "Vanity Fair."

With permits secured, equipment purchased and packed in boxes (weight, 60 pounds each), with special advice all written down, we were safely aboard that Sunday morning when the little boat shoved off up the White Nile toward Rejaf.

The ship's company included a Swede who had spent 12 years as a district governor in the Belgian Congo; an Australian who governed a back district for the English in the Sudan; an English major who had seen service in India and endured nine months in a German military prison; a Syrian doctor who had spent 17 years in the sleeping-sickness areas of the Sudan (a most unusual survival); two Egyptian doctors who were going into this sleeping-sickness area as the Syrian's

Photograph from Kodak (Egypt) Ltd.

A HARNESS MAKER'S SHOP IN EGYPT

This outfitter sells nothing but stable goods made of palm fiber. The variety of articles shows the importance in native life of the only tree species common along the Egyptian Nile. Palms also furnish building material, sugar, oil, wax, wine, dyeing materials, and resins.

assistants; an English engineer bound for Abyssinia; and two vagabond Americans, who were traveling overland toward Cape Town in the wrong season!

For three or four days after we left Khartum, there was still the desert for company. The heat was insufferable. There was no ice on board, and food was purchased daily at native villages. We lived on eggs, chickens, lamb, vegetables, melons, and tinned foods.

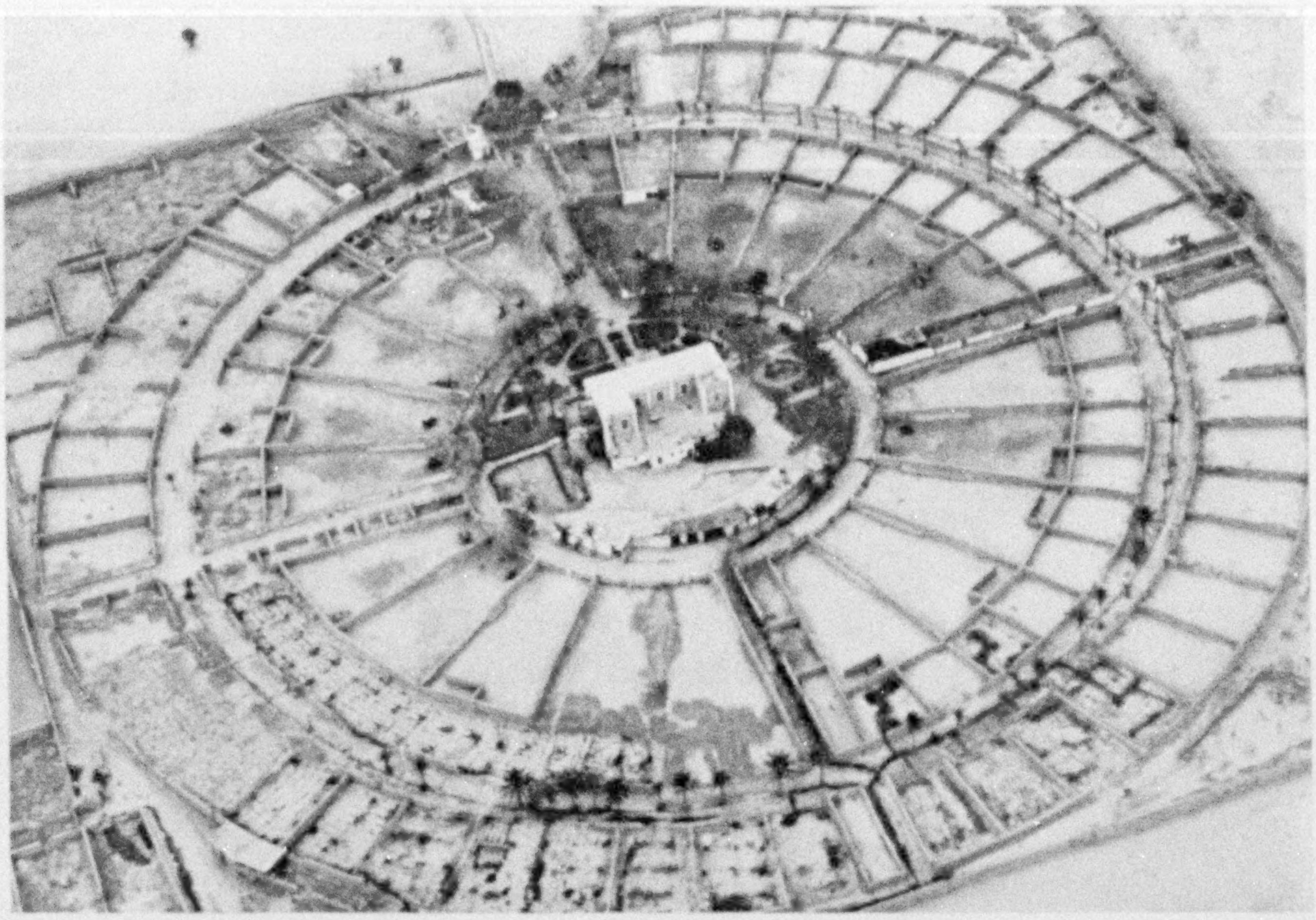
The desert behind us, we entered the Sudan proper. The land was fertile and level to the horizon. Thousands of cattle grazed along the shore.

About 160 miles up the river we passed Abba Island, where the Mad Mahdi once worked as a boatman.

NATIVES STAND LIKE CRANES ON ONE LEG

Soon the characteristics of the natives changed. So far, we had seen only Arabs and mixed breeds. Here we met Negroes and Negro-and-Arab half-castes. The Negroes were genuine savages; they wore feathers in their hair and rings in their noses.

Two interesting black tribes are the Shilluks, who live on the west bank of the Nile, and the Dinkas, who live on the east. Both average close to seven feet in height. They are as thin as the Nile



Photograph by J. Blackburne

AN OSTRICH FARM AT CAIRO FROM THE AIR

Careful segregation of ostriches during nesting time and division of the flocks as they mature require extensive pens. The birds are long-lived. Claims are made of ostriches 100 years old. Fashion, with a careless whim, decides for or against prosperity on the ostrich farms, most of which are located in South Africa.

cranes, and stand like cranes, on one leg, with the other leg drawn up under them!

The Shilluks wear two huge "Scotch tams" of matted hair, one on each pole of the head. This was our first introduction to the extraordinary coiffures of the male African. Some leave the hair its natural color, while others dye it a bright red with lime.

The Dinkas decorate their woolly pates with gay-colored feathers.

All carry spears and knives strapped to the back of the upper arm behind the elbow, where they are quickly accessible.

Most of them smear their bodies with ashes to keep off the mosquitoes. This makes them look like gray ghosts. They sleep in the ashes of their fires at night.

The men are the beauties; the women do the work.

Some of these dandies wear tight copper bracelets round their wrists until their hands grow numb and useless. They posed and displayed their deadened hands covered with rings and bracelets, which, we were told, their womenfolk greatly admire.

The women wear only a strip of dun-colored cotton. Many of them stood naked to the waist, neither embarrassed nor self-conscious.

One finds it easy to recognize the Negroes with a mixture of Arab blood. The eyes betray them. The Arabs have eyes of a peculiar and distinctive luster, moist and luminous, and shaded by long eyelashes. The dirtiest little Arab girl can perform tricks with her eyes that are astonishing. It was amusing to see those half-caste girls attempt to woo the white men with their eyes.

800 LANGUAGES AND DIALECTS ARE SPOKEN BY AFRICAN BLACKS

There are some 800 languages and dialects spoken among the more than a hundred million Negroes and negroids in Africa.

In many sections languages and customs change with each 50 miles.

These particular Nile blacks are shift-

less, vain, noisy, and warlike. Their villages are clusters of grass huts, like gigantic beehives.

These savages own fine herds of cattle and flocks of goats. They eat the sheep and the goats, but they use the cattle for currency. So many cows buy a wife. Wealth is counted thus. They drink the milk, but it is very unwise for a white man to do so, because of certain unpleasant native practices in milking.

After the first five days up the Nile we approached the big-game country. Hundreds of hippos splashed in the shallows. Whenever we negotiated a bend in the river we would see dozens of pink noses and piglike faces turned toward us. They would sink almost immediately; then rise and peek at us; then sink again, rise and wiggle the water out of their ears and eyes, and peek and sink once more. One frolicsome fellow hurled himself clear of the water and dived like a fish. His bulk considered, that was no mean feat of agility. Certainly, to shoot these inquisitive, fat animals cannot be called hunting.

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RAPID TRANSIT AT LUXOR

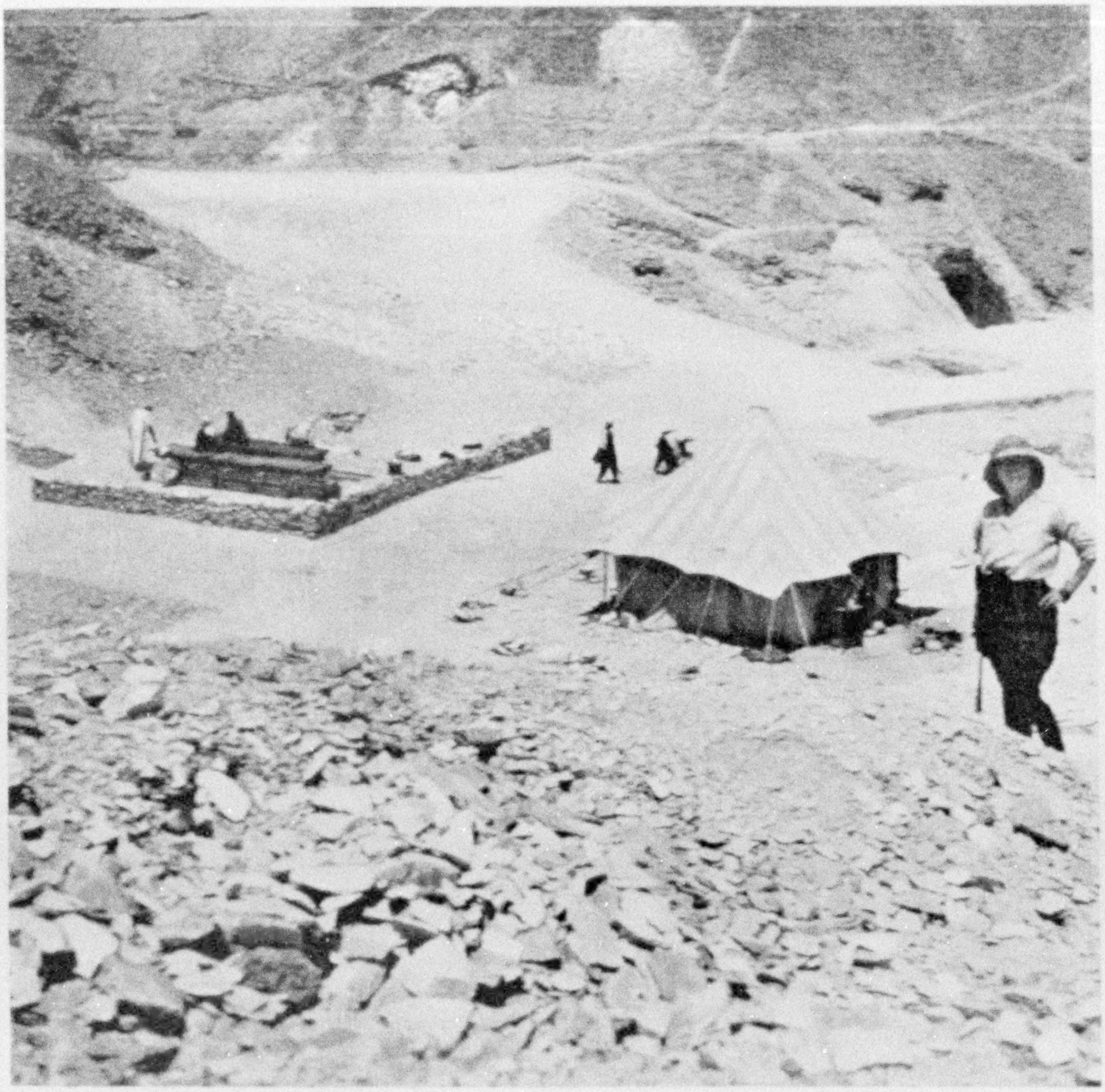
Water bucks and gazelles and antelopes spotted the landscape. There was an infinite variety of horned animals.

On every bank we saw crocodiles sunning themselves—lazy, deliberate fellows, grotesque survivors of a prehistoric age. They were twice as large as we anticipated, and when we encountered them farther inland, they stood up on really long legs and wiggled and wobbled away with considerable speed. When they were near the water, they slid in with scarcely a splash.

We saw storks and cranes, herons, hawks and eagles, and many varieties of ducks, pelicans, and scores of birds for which we had no name. All day long flights of birds were passing overhead and feathered congresses were talking it over on the shores.

A CARE-FREE LIFE LED BY THE NATIVES

The country so far was flat, level, and dotted with trees. This soil was black and rich and the natives lived easily. No one yet has devised a plan for making the native Africans work. They seem to wish for nothing that is not free and under their hands. They wear practically no clothing, live in grass and mud huts,



Photograph by Felix Shay

CALLING AT KING TUTANKHAMEN'S TOMB

The entrance to the 3,000-year-old vault of Egyptian treasure is to the left of the tent. Discovery of the ancient king's tomb, with its gorgeous burial furnishings intact, brought heavy tourist trade to the completed Cairo end of the Cape-to-Cairo Railroad. The Valley of the Kings, in which the tomb was found, is on the west bank of the river, across from Luxor, where visitors arrive after a 450-mile rail journey from Cairo.

and find amusement in having children, hunting, fishing, frolicking, singing, dancing, and decorating their bodies.

These natives have evolved a school of arts and decorations for the human body that excites wonder. The variations are multitudinous. They wear teeth and bone bracelets, metal anklets and nose rings, curious amulets and charms, and odd bits carved from ivory.

Meanwhile, the land and civilization languish.

The Swede said, "I had a black boy once, and he was a good boy. I took him with me when I was detailed elsewhere, but first I had to have his neck glands examined for sleeping sickness. I took him to the doctor's office and left him there while I went to the Governor's house. Just as I came back I met the boy running away as fast as he could toward the jungle. I shouted to him and he came to me.

"'What's the matter?' I asked.

"'Oh, Master, the doctor started to feel if I was tender. He was going to *eat* me!'"

The Syrian doctor showed us, under

glass, one of the tsetse flies, the bite of which causes sleeping sickness. It was a little larger than the ordinary house fly, its wings overlapping like the blades of scissors when the insect is at rest.

The first two nights Porter and I slept modestly in our cabin. We surrendered the mosquito room on the roof to our fellow passengers; but when we found ourselves unable to breathe below, because of the heat, we abandoned modesty and joined the other passengers outside.

I never saw so many or such a variety of insects. We observed two or three families of mosquitoes; white ants, black ants, red ants, and flying ants; spiders from the size of a pinhead to the size of a dollar; large green flies, cattle flies, horseflies—and flies; gnats and sand flies so small they easily passed through a mosquito net to burrow in one's flesh; dragon flies, big buzzers, airplane stingers, and darning needles on wings; gnats and ticks and a dozen varieties of grasshoppers!

They blew in from the marshes and covered the decks and us. We pulled our socks outside our trousers to fend off the curious ones. Porter wore riding boots and defied them.

At night the natives held a torch over a hole in the ground. The light attracted thousands of flying ants, which were scorched and dropped in. When the hole was filled the feast began. The natives ate them!

PASSING THROUGH THE SUDD REGION, HOME OF PAPYRUS

We passed into the Sudd, the high-grass country, whose swamps grow the papyrus grass from which was made the writing material of the ancient Egyptians. These papyrus growths once blocked the channel of the Nile and made navigation impossible. To this day great islands break away from the banks and temporarily obstruct the channel.

In this high grass we fell in with a herd of some twelve wild elephants, within 30 yards of us. Then we learned how fast an elephant can travel. When they saw the boat they lifted their trunks and started to amble off in leisurely fashion. Within a few minutes they were mere specks on the horizon.

Hunters dare not go after these big beasts in this region, for if wounded the elephant may charge, and when this occurs it is well to have solid footing or some substantial place of refuge.

We were three days passing through the Sudd.

One who thinks he has experienced mosquitoes should make the acquaintance of the multitudes on multitudes that swarm in these swamps.

Going up the Nile is an adventure in navigation, for there are numerous sand bars, and between trips they change from one side of the river to the other. Once a day, at least, we ran aground solidly, although our boat drew only four feet of water. We would churn the water back, go forward, turn left, turn right, and after so long a time the soft mud would be ironed out and we would be free to go forward again.

Once or twice a day we ran smack into the bank while attempting to negotiate a narrow turn. In this part of its course the Nile is extremely tortuous, and to hold the channel we kept to the extreme outside of each bend. There the water was deeper—perhaps.

When we reached a native village we simply plowed into the mud and put out a gangplank.

At various of these interior stations we lost our fellow passengers, one at a time. The English major went into a district which was a real killer, with all the fevers and plagues. The year he spends there counts double on his service record, so he will be retired that much sooner. If he lives, he wins. If he dies—well, Kismet!

One quickly becomes a fatalist in Africa.

A BIRD THAT PLAYS DENTIST TO A CROCODILE

We passed little hippos riding on their mothers' backs.

We saw that strangest of sights, a little bird, the ziczac, inside the open mouth of a crocodile, cleaning its teeth. We saw a crocodile catch a fish and grin, and while he grinned the fish jumped out.

On the Nile we met the rains blowing down from up country. They were extremely violent, so much so that the boat

Photograph by Gaddis and Seif

SOLDIERS IN THE VALLEY OF THE KINGS GUARDING TUTANKHAMEN'S TOMB

The entrance to the tomb of Rameses VI is below the lone tree on the hillside to the right. Behind the soldiers is Amenmeses' tomb. Next to the right is the vault of Rameses III. The water jars to the left mark the spot where Theodore M. Davis and his associates stopped work, and thereby missed the discovery of Tutankhamen's tomb by a few feet. Overhanging the débris-strewn royal graveyard is el Qorn, a natural pyramid. Ancient Egyptians liked to bury their dead in the west, where their Sun-god went to sleep, and therefore the Valley of the Kings, with its graves, and the Pyramids of Gizeh are on the west bank of the Nile.

was in perpetual danger of being overturned. Two or three years before, in the rains, one of these White Nile boats was blown over on its side and sunk. There were several fatalities. In consequence, whenever we saw a storm coming, the skipper put for the bank. Then the black sailors went over the side and anchored us to several trees.

Before and after these storms there were marvelous sky effects. The skies seem more expansive in this part of Africa than elsewhere in all the world. They convey an awesome impression of vastness. They were often smoky, sullen masses of threatening color, but we were entranced by the marvelous afterglow in the evening, after the sun went down.

Here we began taking a daily dose of five grains of quinine. A missionary on shore told us that he had taken five grains every day for 15 years, "and I'd not like to see that quantity all in one pile," he added.

A GOOD WIFE IN THE CONGO SELLS FOR 10 GARDEN HOES

The Swede started a story, which was interrupted by the appearance of 14 wild elephants on the near shore. They lifted their trunks and moved off. Elephants have a remarkable sense of smell, and some hunters maintain that when the wind is in the right direction they can detect the presence of man two miles away; but their eyesight is so poor that they can see him clearly at only 100 feet.

The Swede took up his story again:

"The Congo Pygmies kill elephants by creeping up on them. The Pygmies smell like animals, so there is no warning odor. When they reach the elephant they want, they quickly slash the beast's leg tendons with a sharp knife. Then the elephant finds himself unable to stand. He falls to the ground. That is the end of him."

This tale left us with an unpleasant mental picture of a little black man wriggling noiselessly through the grass with a knife in his teeth, perhaps toward our camp.

When the Syrian doctor left us he waved good-bye from the bank and shouted, "I will meet you three years from now in Paris."

These men are above despair.

We had some discussion as to how much a black wife was worth in cattle. One of the white men said, "Well, a chief's daughter will cost you about 50 cows; but that is excessive. The gentleman not only buys the lady; he buys her social standing as well. One should be able to buy a nice, plump young wife for not more than 10 cows."

The Swede protested: "In the Congo country one can get an A-1, all-wool young wife for 10 garden hoes."

We met savages on the river in tree-trunk canoes. They put ashore and stood and stared. The wash of our boat would have upset them, they knew. We also saw natives wading and "fishing" with spears.

Many of the grass huts were tiny bee-hive-shaped structures, not large enough for a man to stand upright inside. They were surrounded by stockades of yellow reeds.

One night, just as the dark descended on us, the boat stopped at a clearing. We were in a malarial country. The damp rose from the ground like a mist. The mosquitoes swarmed. We went ashore for exercise, but the body odor of the multitude of blacks was sickening and drove us back on to the boat.

At that point an English missionary came alongside in a big war canoe manned by 20 native paddlers. He was a splendid type of man, who had spent more than a dozen years among the blacks in Africa. The canoe he had brought overland from the Congo on wheels. There are no trees in the Sudan of sufficient size to make these great boats.

Perhaps the transportation overland of this canoe took a whole year. With it and his native paddlers he traveled the principal rivers and the side streams and visited the inland blacks. He ate native food and slept when and where he might.

Only a very exceptional man, inspired by the work he was doing, could survive this kind of life.

This missionary attempts to teach the natives peace, morality, the respect for property rights, personal cleanliness, agriculture, and, just incidentally, religion.

Toward the end of the sixteenth day we nosed again into the mud bank. That was Rejaf!

Rejaf rests on a hill, a typical Nile River station.

The mamour, the official in charge, was an Egyptian.

He lined up 100 black boys and permitted us to select 22. No English-speaking boy was available, no cook obtainable, and no boy present had ever attempted to cook for a white man.

These boys could carry loads. They were willing to go approximately half the distance to Nimule (see map, page 128). That was enough for us. At 3 o'clock the second day we set out.

The carriers were to walk with us 57 miles, to the limits of their district. They were not permitted to enter the next district, as it was a sleeping-sickness area. At the border we were supposed to engage another safari to take us through to Nimule.

The mamour marked and mapped the so-called resthouses to the boundary of his district. Beyond that he had no information.

A traveler must "go it blind" and trust to luck in Africa.

"DEADEYE DICK" IS THE CENTER OF THE FIRST DISTURBANCE

On the far side of the Nile we ran into our first bit of trouble. Among our porters we had selected a one-eyed man for luck. Getting out of the barge, "Deadeye Dick" had a disagreement with one of the younger boys as to who owned what. He slapped the boy's face; the slap stung. Before the boy had time to remember his manners he struck "Deadeye" in his good eye and knocked him into the river.

Immediately an uproar!

A couple of sprightly colored ladies standing by laughed at "Dead-eye," which rather complicated the situation.

These ladies painted their bodies with a kind of red, oily clay, which entirely changed their appearance and made them look like some one else. Their apparel consisted of a little fringe in front and a "horse-hair" tail behind. They were not very tall, but well developed.

The safari set out boldly along the Nile.

Stark-naked muscular blacks stood in the fields and saluted us. A few had skins around their waists and carried spears. The women were stocky, well developed, and much fatter than the men.

These savages go about completely exposed to weather and sun. The human form divine is a creation of civilized man. Savage people may have strong, sturdy bodies, but rarely beautiful bodies, according to our standards. All of them had slightly bowed legs.

One dropped part of his equipment; he picked it up with his foot, using it as a hand. Their feet are spread, their toes prehensile.

NEW JERSEY SCENERY IN CENTRAL AFRICA

About three miles from where we crossed the Nile, we were obliged to ford another river, waist-deep. There was a discussion as to whether we should disrobe. We discovered that civilization rested heavily on us; we waded-in in our clothes. But for an hour afterward we attempted to decide, "What is propriety in an African jungle?"

Just beyond this river was a resthouse. While the boys ate peanuts, we loitered in the shade. Peanuts were the food staple of these carriers. They took with them peanuts and durra flour and nothing else.

After fifteen minutes' rest, we set out for Shoga, a village seven miles away. We planned to complete 10 miles before we slept. We walked in the cool of the afternoon, through beautiful country.

The native villages seemed prosperous. The blacks either greeted us curiously or else turned away and ignored us; the little children shrieked and fled to their mothers at sight of us. The countryside was green and verdant. There were many fine trees scattered on the landscape. We expected a desolate wilderness or tropical jungle; we encountered here a region similar in appearance to suburban New York or New Jersey.

Occasionally we met blacks grubbing weeds out of the main path with their pick-hoes. In this way they pay their taxes.

The sunshine was mild and invigorating after our escape from the desert and Khartum. A cool breeze blew. Thousands of birds of infinite breed and varied plumage flew about. We were amazed at their fearlessness. The only disappoint-

Photograph by Gaddis and Seif

FREIGHT BARGES OF THE NILE AT LUXOR

Native dhows with perilously high lateen sails help bring out the products of the Nile Valley. To the Sudan the world looks for the best qualities of one obscure raw material, gum arabic. Harvesting good grades of gum arabic from a species of acacia depends on a hot, rainless season, and this the Sudan supplies. This gum serves in medicine, mucilage, and photography. The world is beginning to look to the Sudan for cotton, too.

ment was an absence of wild flowers; but there were flowering trees.

We barely managed to keep up with the safari.

Much to our surprise, they took short steps. One presupposed that long-distance walkers adopted a long, swinging stride, but not these blacks.

MEN OF THE SAFARI WERE DESCENDED FROM CANNIBALS

Those who laugh at the big feet of the American Negro should see the work such feet are educated and adapted to do. They have the natural feet, we the unnatural. Long before the first 10 miles were finished, our shoe-wrecked "civilized" feet were crying "enough."

These men of our safari belonged to the Bari tribe, of the region of Rejaf. Some years ago a cannibal tribe swooped down on the then peaceable Bari, killed the men, and ate most of the young children. The Bari women the cannibals took as their own and settled down to lead a domestic life on the spot.

Therefore the Bari are a considerably mixed tribe.

We had several gentlemen in our safari who, even at this late date, looked as

© Elmendorf

CONTROLLING THE LIFE OF EGYPT AT ASWAN

These gigantic jets of water are spurting through sluices 6½ feet wide and 28 feet high, in the Aswan Dam. Before the construction of this dam the Nile was a curse as well as a blessing. The terrific floods brought fertile mud, but by March the valley parched for lack of water. Aswan, with its mile and a quarter of masonry, 131 feet above the foundations, is one of the world's longest dams. Between July and November wide-open sluices let the muddy water through, but during the winter a reservoir 185 miles long husbands supplies for the dry months.

though they would not shrink at a human shinbone.

There was native warfare in Rejaf as late as 1910.

We had men of all ages in our safari; some as young as 16; one at least 60. Four of the youngest ones were reserved as personal boys, two to put up the camp beds and wait on table; two to make the fires and cook (?).

One of my personal boys had his hair cut and shaved in scrolls; the other had a topknot of wool which decorated his crown. Porter gave each of her boys a string of bright glass beads to wear, which made them easy to identify.

When we reached Shoga it was dark. There was an empty hut, and we proceeded to make camp. We had never erected our camp equipment before. Certainly the boys did not know how to do it. In the intense darkness one could not see these black boys two feet away. Detached, spooky hands were always reaching out of the dark to help with a task. For amateurs to make camp in an unknown land—put up beds, mosquito nets, tables and chairs, and cook a meal under such conditions—was no small task.

The only real mistake we made was to place our beds on the inside of the hollow square facing our carriers. Placed on the outside of the square, there was more privacy and much less noise. We made this mistake but once.

These resthouses are set down in the wilderness, apparently adjacent to nothing but water. Sometimes there would be a native village concealed on the far slope of a near-by hill, but unless one looked twice it was almost impossible to discern them.

SAVAGE AFRICA CELEBRATES THE MOON

The resthouses are surrounded by stockades of saplings to keep out prowling animals. Inside the ground is bare. The hut shelters are made of mud and straw, with hard dirt floors. Sometimes there is a mud fireplace for cooking; sometimes not.

At Shoga we saw no native village, but soon heard one. The moon came up, the first clear and cloudless night for weeks. The rains had passed north. Shortly after we turned in, we heard the thrum of a tom-tom calling quietly, insistently. A fire was reflected against the sky. Apparently there were to be "doings."

Our carriers became very restless. The moon was affecting them, too. Dark forms walked from group to group. There were sibilant whispers and muttered conversations.

Then the tom-tom began to sob and moan. The noise seemed to come from immediately outside the stockade, but the glare of the fire assured us it was 100 yards off. Nevertheless, I rolled on my side, felt for my revolver, and placed it under my pillow. Dead tired and aching for sleep, we lay wide awake and waited.

The fire mounted higher. The whole sky grew red.

The tom-toms beat a wild and furious quickstep. Suddenly we heard a chorus of a thousand voices! Such singing! Those who have listened to plantation songs by a large group of American Negroes will have a slight conception of the glorious harmony and resonance of these voices. Men and women sang together, and a fairy flood of children's voices floated in at intervals, followed by an ecstatic cheering.

A CIRCLING MULTITUDE DANCES ALL NIGHT

From 8 o'clock, when the drums first called them together, till the dim of the moon, they sang, they danced, they beat their tom-toms.

One song they sang was as fast as "Jingle Bells," with almost as many parts as "Three Blind Mice." It ended with a mighty and sustained crescendo, like the locomotive cheer at an American football game. When the last echo of this cheering died out, we could still hear the chink-chink, chink-chink, of the metal ornaments which the women wore around their arms and ankles. . . .

Long after midnight we deserted our beds and walked into the clearing behind the resthouse and watched the multitude of dark forms circling the fire. Round and round they went, until our eyes grew weary from watching them. Perhaps more adventuresome spirits would have walked across the distance and intruded on the show; but we were new to the premises and still a little fearful about savage Africa.

Photograph by Felix Shay

BENEATH "CHINESE" GORDON'S STATUE AT KHARTUM

General Gordon earned his sobriquet by his vigorous action in putting down the fanatical Taiping revolt in 1863, and he won immortal fame by his defense of Khartum, capital of the Sudan, against the Mad Mahdi's tribes in 1884-5. With one other British officer, he was isolated in Khartum while superintending the evacuation of Egyptian civil employees. Organizing a defense, he held out for nearly a year; but the city fell and its intrepid defender was killed two days before the rescuing force arrived.

Before we were decently asleep the black carriers were up and stirring. They like to travel in the cool of the morning. Travel between 10 a. m. and 3 p. m., in the hot sun, means disgruntled boys.

While we were at breakfast the last of the revelers were still stroking the tom-tom and trying to sing something that might have been "Auld Lang Syne." We were under way by 5 a. m.

The second day we were to walk to Pettia Liminda, a distance of eight miles,

Photograph by Porter Shay

THE AUTHOR'S SAFARI THREADING THE TRAIL THROUGH BROKEN COUNTRY IN THE SUDAN

take lunch and rest; then walk to Pettia Logar, a distance of six miles, for supper and a sleep. When one walks in Africa he learns that distances are essentially approximate!

On the path that day we met few blacks. Some of the women wore winding, coffee-colored skin sheets. With heads shaved, they resembled Buddhist priests.

The country we passed through was similar to the deserted farm lands of New England. The land was uneven, hilly, rocky. Small trees dotted the landscape. Often we would come on what seemed an overgrown and neglected orchard, though, of course, it was not.

Apparently there were no tropical growths, as we recognize them. The country was such as one would find in the North Temperate Zone. We were five days toward Nimule before we saw our first palm tree.

The weather was cool, except at midday. Often there was a breeze. We were quite comfortable walking and enjoyed it very much.

We still had the rag end of the rains with us, but occasional showers fortunately found us under cover.

Photograph by Felix Shay

SUDAN NATIVES WITH A TRACE OF ARAB BLOOD

The Nile is a racial boundary in northeast Africa. West of the river tribes in which Arab blood is strong predominate. East of the Nile are the Hamitic tribes, who in migrations south have furnished Africa with some of the fiercest and sturdiest native stock on the continent.

The black boys who walked with us were paid 10 cents a day. They carried 60 pounds on their heads and averaged 17½ miles a day. They supplied their own food, consisting of soggy, doughy cakes of durra flour, and peanuts, varied only when we volunteered to buy them chickens or goats.

For each day's march we were obliged to assign the loads specifically, else the large boys would take the lighter loads and give the smaller boys the heavier.

We took along a surplus of carriers, so there was a relief for the boys who were too heavily burdened. In the early morning we indulged a lively interest in life; we conversed, we philosophized, we joked. After the first 10 miles silence reigned.

Soon the country was empty of natives.

We passed by a rocky ridge off to our right. There was the sound of a rending of limbs. Giant baboons were venting their displeasure on the trees. These creatures, gray in color, were about four feet high and weighed approximately 100 pounds each. They barked at us like dogs—a hard, sharp bark. While watch-

Photograph by Felix Shay

MRS. SHAY AND TWO SUDANESE CARRYING CUDGELS

"One day we were joined on the march by two savage women. One was short and pudgy; one tall and angular, with a new baby strapped to her back under a half-gourd shell. Each wore a skimpy fringe about the waist. We found that the gift most appreciated by these women was a box of matches" (see page 154).

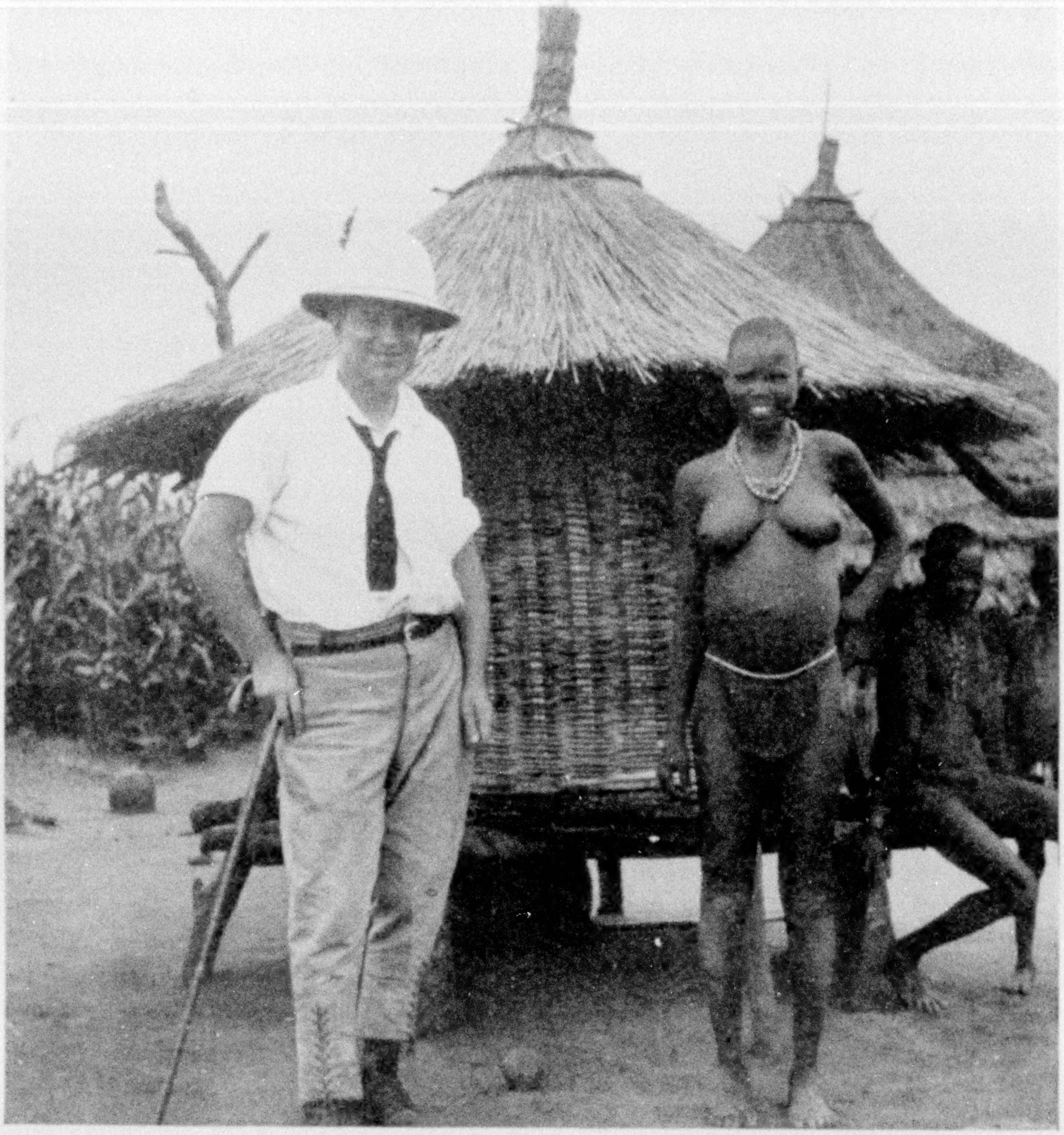
ing us, they would swing from tree to tree, miss their objective, and go crashing down among the limbs. There were at least 100 in the troupe.

BANDAGES FOR BLISTERED FEET

When we reached Pettia Liminda we bathed and changed into fresh clothes. We applied adhesive tape to our blistered feet, which were unaccustomed to tramping, as we had spent too much time on shipboard the preceding year. We dined and lolled in camp armchairs. A delightful calm came over us. We had walked ourselves into a state of complete relaxation.

A little blackbird alighted on the palings of the stockade and sang us a super-Galli-Curci aria, and I am sure we were not an unappreciative audience.

The mamour in Rejaf had advised us that the launch would sail south from Nimule six days later, at noon. Therefore we had just six days to walk 90 miles (which proved to be 105 miles). We accomplished this distance with half



Photograph by Porter Shay

THE AUTHOR POSES WITH A SIXTEEN-YEAR-OLD GIRL OF THE SUDAN

The conical wicker-work structure is used as a granary (see also illustration on page 184). Mrs. Shay, who made the photograph, was an object of deep interest to the native women.

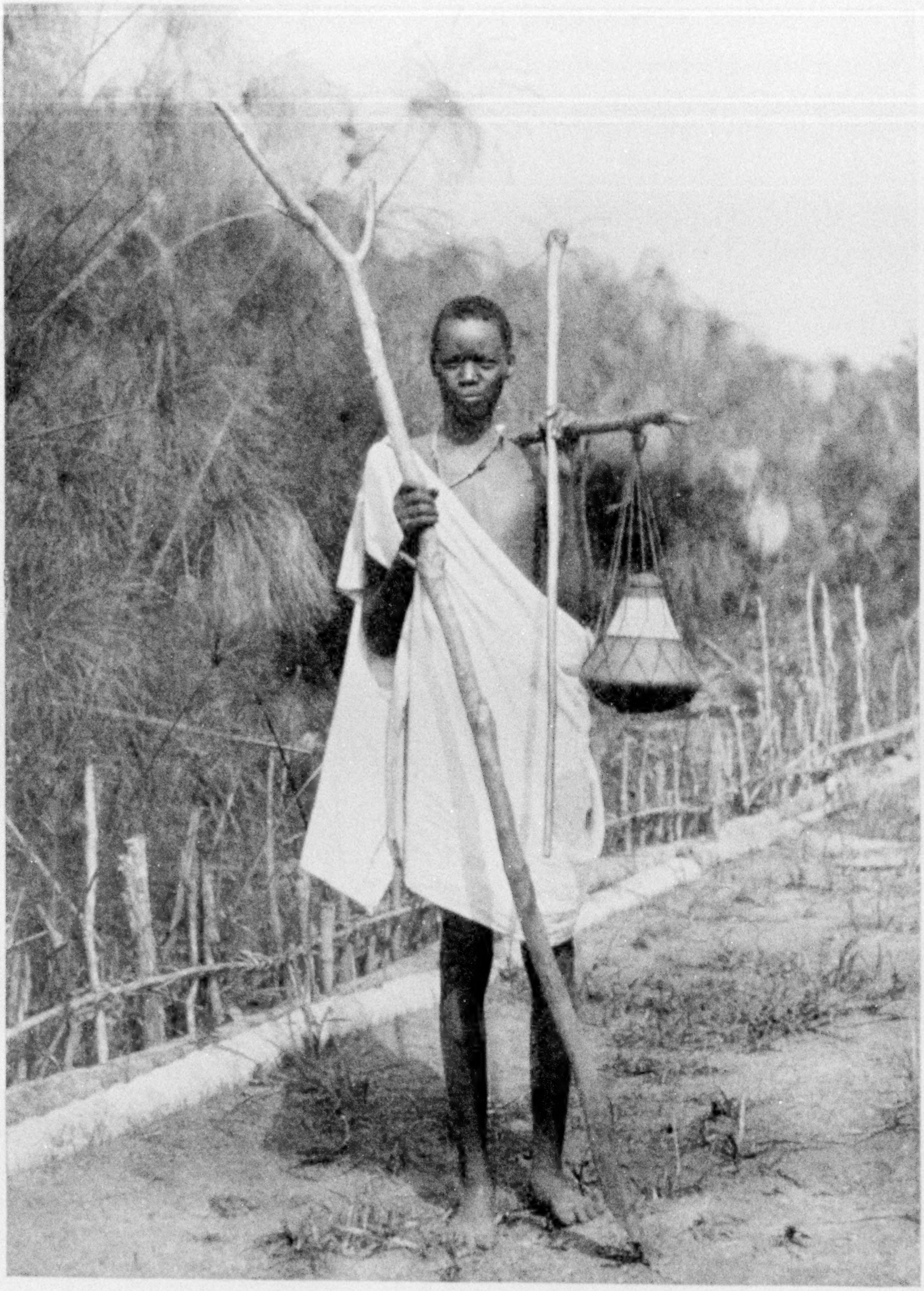
an hour to spare. This required that on certain days we cover as much as 20 miles. Such days we were forced to walk into the noonday heat, which is not sport in the Sudan.

NATIVE WOMEN DELIGHTED WITH GIFTS OF MATCHES

In "Donovan Pasha" Sir Gilbert Parker writes: "In the Sudan three hours' march will usually draw off the froth of a man's cheerfulness." Some days we marched for eight hours, and at the end of the journey cheerfulness was not in us.

One day we were joined on the march by two savage women. One was short and pudgy; one tall and angular, with a new baby strapped to her back under a half-gourd shell. Each wore a skimpy fringe about the waist. We offered them cigarettes, but they made a mess of them; they were accustomed to pipes. We found that the most appreciated small gift to these women was a box of matches.

Our daily walks were from native village to native village. Until one reached a village (or water), he must continue walking.



Photograph by Vittorio Sella

A UGANDA NATIVE CARRYING MILK

Milk has a very definite connection with social position in Uganda. The dominant class is a pastoral people; the serf class grows crops. The Bahima, or governing caste, rigidly adheres to a diet of milk varied now and then with beef, a custom which is believed to be a relic of life on the plains before the invasion of the south. The milk carrier is a typical Bahima, tall and thin, but having a well-balanced physique. Missionary efforts have prospered in Uganda and thousands of natives have accepted Christianity. The white tunic is usually the badge of a Christian in that protectorate.

Photograph by F. J. Koch

A STATELY DAUGHTER OF THE SWAHILI TRIBE

The aristocratic bearing of the Swahili women has its source in the lowly task of bearing burdens. The Swahili are mixtures of Arab and Negro and have given Africa a widely used language, Swahili, a patois of Bantu and Arabic. The Swahili who live in the Zanzibar district are much used as porters for expeditions to the interior, and with them has gone their language.

most of them we waded up to our waists, or to our armpits, and defied the crocodiles. After a couple of wettings, Porter elected to ride across the rivers on the shoulders of one of the sturdy blacks. Once they attempted to carry me, but they nearly dropped their 175-pound burden into the stream; so I decided thenceforth to wade.

ENTERING A LAND OF SLEEPING SICKNESS

One day we reached Goombri, which was the frontier of the sleeping-sickness area. There we paid off our first safari of boys and negotiated in sign language for a new safari at a near-by native village.

The new carriers reported promptly at 6 o'clock the next morning. We were very glad to see them, as our first corps of boys had gone back home, and it was no pleasant sensation to be left alone in the middle of Africa.

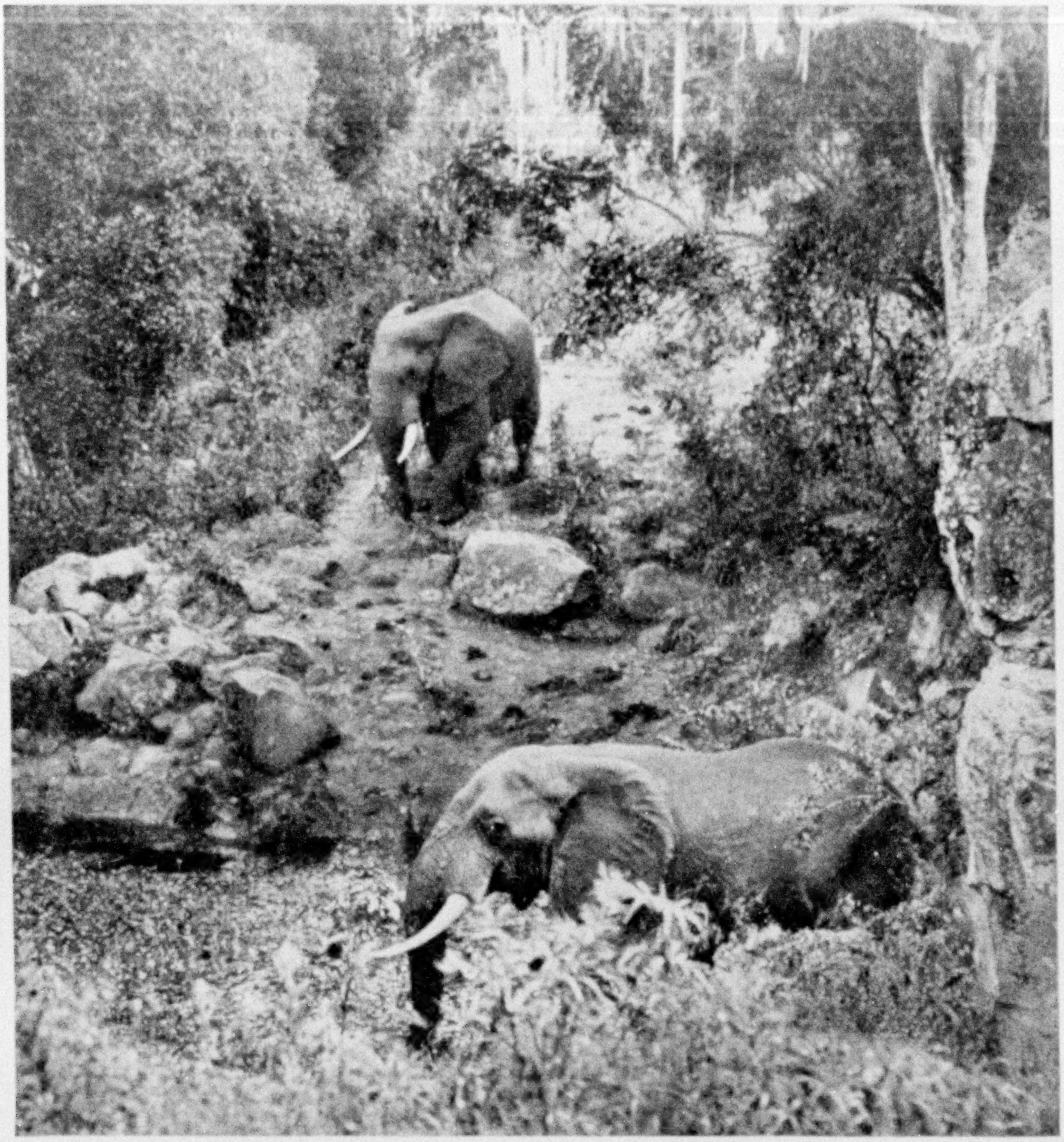
The new boys were of the Madi tribe. They were more savage, more serious-minded, and not so frivolous or gay as the Bari crowd; but they were better set up physically, stronger, and went about their work in a more businesslike fashion.

We had picked up a few words of the Bari language on the trail. The problem then was to learn the language of the Madi. Meanwhile we used a sign language. They said "Ummmmmm" and "Unnnnnn," acquiescing perpetually, as one conversed with them.

All of these Madis looked very much

We now found no difficulty in keeping up with our black boys. In fact, we often led them. Most of the time we followed a fifteen-inch path through broken country. Occasionally the path widened out near a village, where the natives were at work with their pick-hoes. But the natives, in paying their taxes in this fashion, selected the easiest places in the road to grub out the weeds. Where the going is difficult, the native never pays taxes.

We were obliged to ford five or six rivers in this walk of 105 miles. Through



Photograph by Martin Johnson

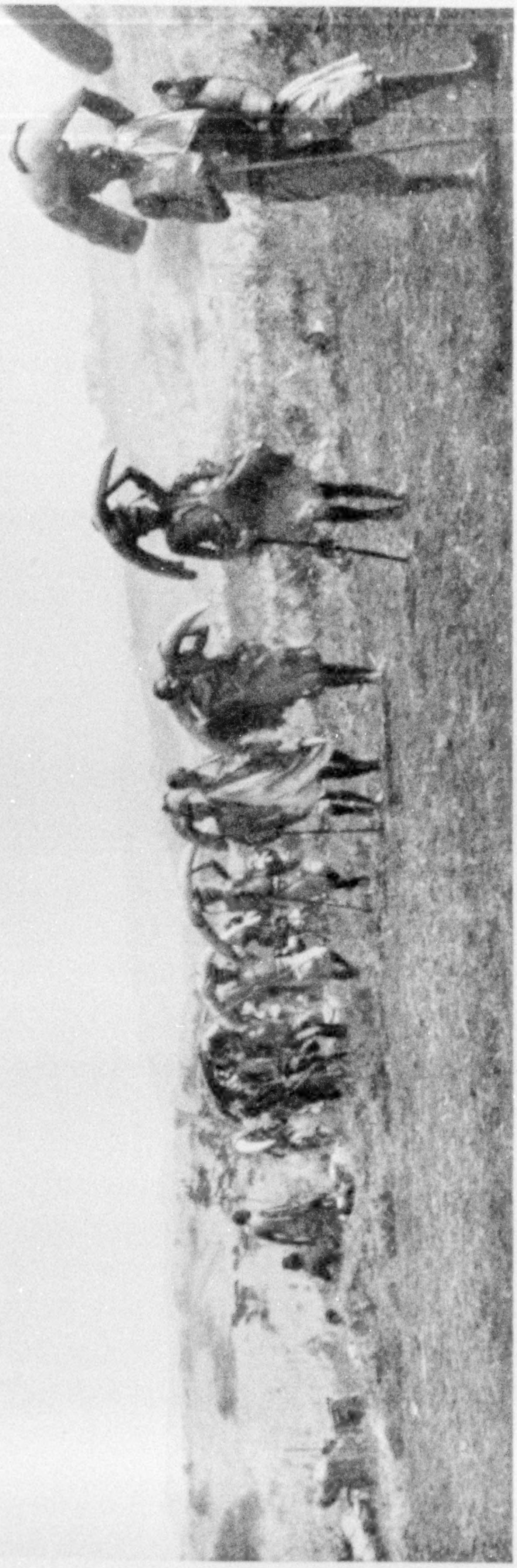
TUSKERS SHOULDER-DEEP IN JUNGLE

The African elephant grows larger than the Indian elephant and is distinguished from his Asian cousin particularly by huge tusks and ears. Tusks serve not only as weapons, but also for uprooting trees the elephant wants for forage.

alike. They had shaved heads, leaving a single topknot, and had filed their teeth to sharp points. Many of them were pock-marked. They looked very ferocious, but they were well behaved in our company.

These savage boys, just out of the jungle, averaged very much as their civilized brothers average. Some were reliable; some were not. Some were ambitious, others lazy. Some had character; others obviously none. Here is a splendid opportunity for a sociologist to make a study of life in the raw.

The new boys were much interested in our bottles of lime juice. Evidently they thought it was white man's whiskey. To prevent them from stealing it, we evolved the plan of letting one taste it. We poured some in the hollow of a boy's hand. First, of course, I told him he would not like it, but he assured me he would. He gulped it down in one swallow. I have never seen anything funnier



Photograph by Vittorio Sella

PORTERS CARRYING CONFISCATED ELEPHANT TUSKS IN UGANDA

So great is the demand for ivory that colonial governments have stepped in to prevent the African elephant from disappearing entirely. A license to shoot one elephant in the Belgian Congo now costs $200. The British Museum in London has one of the biggest African elephant tusks on record; it measures 10 feet 2 inches in length, 24 inches in circumference at the big end, and weighs 226½ pounds.

than his face after that swallow. His companions laughed and shouted in glee. "Lemon," he told them, and again they laughed. After that the bottles were safe.

In camp they were as curious as children. Every empty tin can was instantly taken as a water cup. Every empty lime-juice bottle was spoken for in advance.

The native crops in this territory are few and small, consisting chiefly of durra flour, sweet potatoes, and peanuts. The water that was brought to us was foul and disagreeable, yet there were no fruits or melons for relief.

A conference with these boys to determine distances provided an amusing adventure, because a watch meant nothing to them and a "mile" meant less. They indicated distances with a broad, generous and inaccurate sweep of the arm. Then the inquirer knew as much as he did before he asked.

There was nothing to do but keep plugging onward until we reached a resthouse.

ASSEMBLING FOR A BIG DANCE

One night we ran into a wonderful dance. The guests headed for the place of assembly hastened by us for several hours before we reached it.

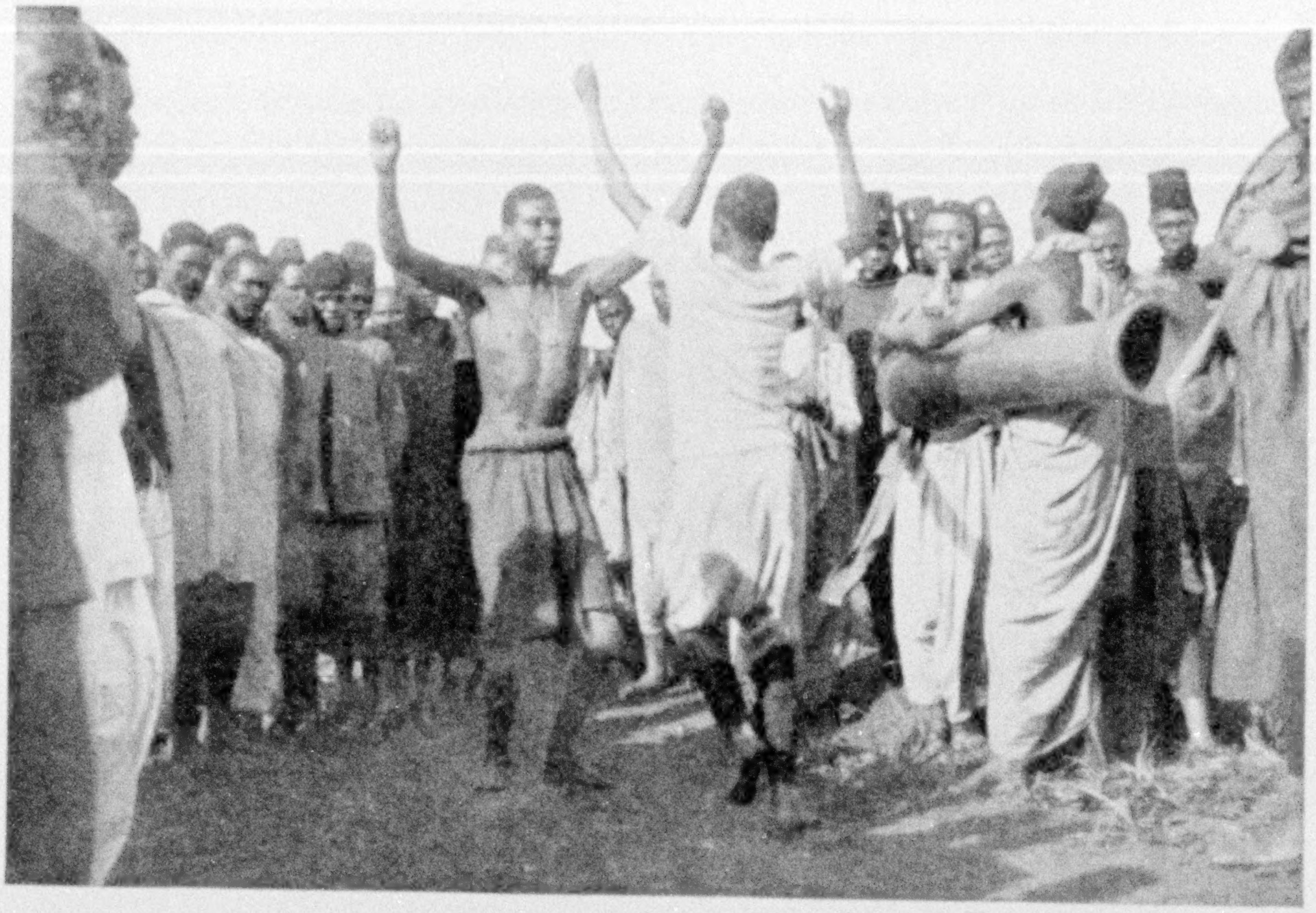
This was at a resthouse called Buna Karaffi.

The women of this section were slender,

Photograph by Vittorio Sella

HAYCOCK HUTS IN UGANDA

Broad acres of growing crops have small attraction for Uganda gentry. A thatched hut and a garden plot of maize, sweet potatoes, or peanuts, are enough for the day's needs. Only a small circle of land about a village is cultivated. When it ceases to be productive a new patch of brush is cut and burned. Corn, sweet potatoes, and peanuts are familiar foods, but the favorite in Uganda is the bananalike plantain.



Photograph by Vittorio Sella

PORTERS DANCING IN CENTRAL AFRICA

with fine physiques. Dozens of girls passed us, hurrying onward to the party, their bodies artistically clothed with oily red clay, their hair arranged in matted masses, shaped up like glistening red chrysanthemums. Most of them wore narrow belts of colored beads. They amused themselves at our expense by whistling shrilly from unseen covers, making the forest seem full of artificial birds.

They had bright, intelligent eyes and clean, white teeth, and were really rather pretty.

Dapper savages passed by, wearing feather crowns of brilliant colors. With legs painted white to the knees and arms and shoulders painted white, they presented a terrifying aspect to the casual observer, if one did not see the comedy in it.

These important dances are given immediately following the rains, preferably on the first moonlight night.

Once in two hours we gave the boys a 10-minutes rest and passed our cheap cigarettes among them, which they greatly appreciated. These natives were communists; each took one long puff and handed the cigarette to the next man.

A little later on the road we passed several groups of women, old and young, who had holes bored in their under lips and wore pendants of crystal or glass in them. We met five pleasant middle-aged women and had a very nice chat in sign language with them; then gave each a box of matches when we said good-bye.

The character of the country changed from hour to hour. It was broken, thickly wooded, and not what one would call tropical. There were stones galore and rocky ledges and ridges. We climbed up and down. Several times we crossed ravines on hand-woven basketlike bridges.

Toward the end of the sixth day out, which actually was five and one-half days in elapsed time, we arrived at Usswa, the last resthouse before Nimule.

A mile or so away was a ridge of hills. We arbitrarily determined that beyond those hills flowed the Nile. Because we were out of cigarettes and lime juice, we endeavored to persuade one of our boys to walk into Nimule and buy a supply for us, while we in turn would wait until the next morning for our tramp into town. But the boy gesticulated and emphasized that such was not possible.

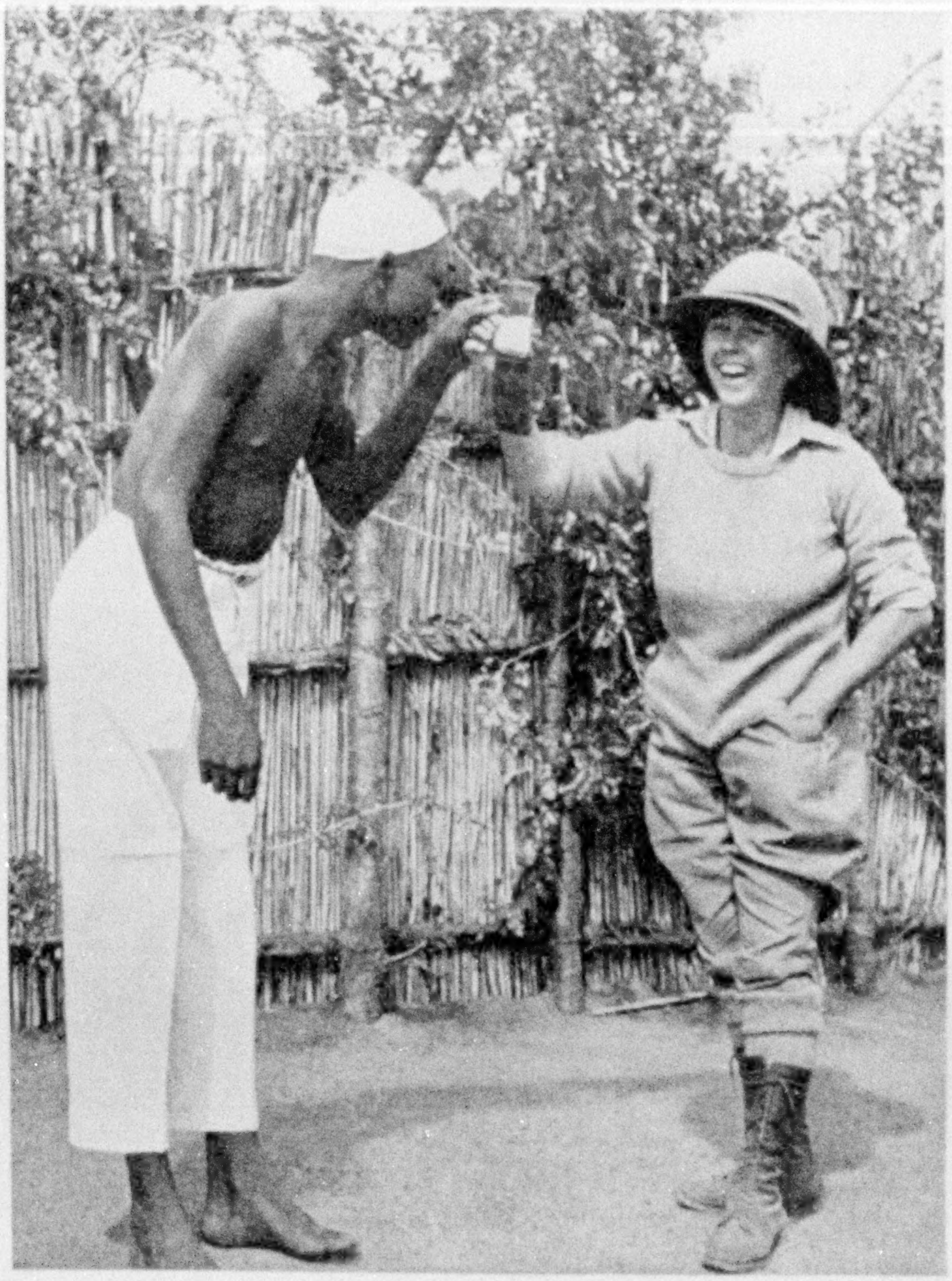
Being fatalists, we took his word for it. Well we did!

Next morning we started late, about 8 o'clock, thinking that Nimule was only a couple of miles away. We discovered that it was 11 miles distant. We walked those 11 miles in three and one-half hours, and limped in half an hour before the boat was scheduled to sail up the Nile, only to learn that it was two days late!

NIMULE, HEADQUARTERS FOR SLEEPING-SICKNESS VICTIMS

Nimule, a Nile village, is the headquarters of a sleeping-sickness area. The detention camp contained several hundred afflicted blacks at the time of our visit.

The superficial aspect of a sleeping-sickness victim suggests that he might be suffering from a combination of tuberculosis and leprosy. It is a horrible disease. The tsetse fly is a carrier, not a breeder, of it. So far, there is no proved cure for sleeping sickness, although German scientists are hopeful that they have found a panacea in "Bayer 205."



Photograph by Felix Shay

HIS FIRST MIRROR: PORTER'S BOY SEEING HIMSELF AS OTHERS SEE HIM

This native's trousers represent one phase of the rapidly changing African customs. The reign of clothes is coming with civilization, but nudity is still proper with some tribes. Good bark cloth is made in many places and is sometimes used for undergarments to go with cotton trousers. A Grecian effect is obtained unconsciously by some dandies who knot a piece of white calico on the shoulder, letting it fall gracefully like a toga (see page 155).

White men are not immune. When one is bitten by an infected tsetse fly, the penalty is almost certain death.

A Syrian doctor at Nimule, a kind and generous host, took the trouble to warn us that the tsetse lives chiefly in low bush country, where shade is plentiful. He suggested that in this area we march in the dark, before dawn. The flies are not active until the sun rises.

There were three white men in Nimule while we were there—the Syrian doctor, an Italian engineer who was measuring the flow of the Nile, and a Serbian count, who was adventuring upcountry and whose route to Lake Victoria paralleled our own.

The first night in Nimule we had an adventure which we shall long remember. The sleeping-sickness camp of the blacks, located something more than 100 yards from our resthouse, was raided by three

lions. The roars of the beasts were terrifying, to say the least. The blacks beat drums and lighted fires to scare them off.

The white men who were dining with us in front of the resthouse excitedly demanded my "gun." The only gun I carried was the army revolver, securely packed away. ("Well, that's a —— of a way to travel through Africa!") Finally we found it and fired several shots into the air, which apparently frightened off the intruders. The next morning we found their spoor within fifty yards of the resthouse.

When we have forgotten the details of this record, when Africa is only a blur in our mind's eye, at night we shall hear the roars of those lions at Nimule. Those terrifying, coughing, choking, threatening, insolent, earth-shaking roars. We heard them again many times in Africa, but that first time made an indelible impression.

To sleep in a resthouse without windows or doors, with lions a few yards away, rather invited insomnia.

A WILD DANCE FOR THE VISITORS

We were just about exhausted when we arrived in Nimule, so that the two days' rest, with nothing to do but visit around, we found very pleasant.

The resthouse here was in very bad repair, but it was situated on a hill overlooking the Nile, and a friendly breeze played around it day and night.

The second night the natives gave a dance in our honor in the public square. The sky was black with storm clouds passing down the Nile. There was a lurid central fire—and more fire to warm the tom-toms. An angular, grotesque figure in a crown made of red and green feathers stroked and caressed and pounded and belabored with a full-arm flap-wing motion the three drums, each of which spoke in its own key. He wore a bit of skin around his waist, feather bands around his arms and his ankles. His feet and upper arms were painted white and a wild fanaticism lighted his eyes.

The government permits these natives to dance only once a week; it excites them too much. When a native gets excited he makes mischief.

A wide-flung circle of black bucks started the movement. They made a terrible din, beating gourds, horns, pieces of hardwood, singing, shouting, and chanting in unison. As they sang they danced furiously, stiff-legged, with feet wide apart. They shook and shimmied their shoulders and spasmodically moved their arms. They were naked except for breechclouts, but their bodies and legs were painted in patterns. They had feathers in their hair. They would sing and dance a verse, then "E-Yah! Boola-Boola! Wiggle-Wiggle! Walk."

Around and around they circled at high speed and with a roaring hubbub.

These wild men of Nimule had a repertoire. The leader shouted; that dance ended and another distinctive number began.

Now we were to see something! Women had joined the dancers. All were innocent of apparel except for the usual little fringe.

They gyrated in front of the men—extraordinary dancers, their glossy bodies performing contortions that would start a vice crusade in any civilized city; yet in this atmosphere, among these savages, it all seemed right, proper, and respectable.

One woman wore a half gourd on her back. Under that shell, tightly strapped to her body, was a four weeks' old baby. We had a look at it. It was sound asleep in that inferno of noise!

The dance increased in violence, though it was difficult to imagine how there could be more noise or more action.

One woman in particular made her body gyrate and squirm, vibrate and quiver, until one felt impelled to break his neighbor's hat and let the nebular hypothesis prove itself.

We wondered whether the "savage" inside each of us is really dead.

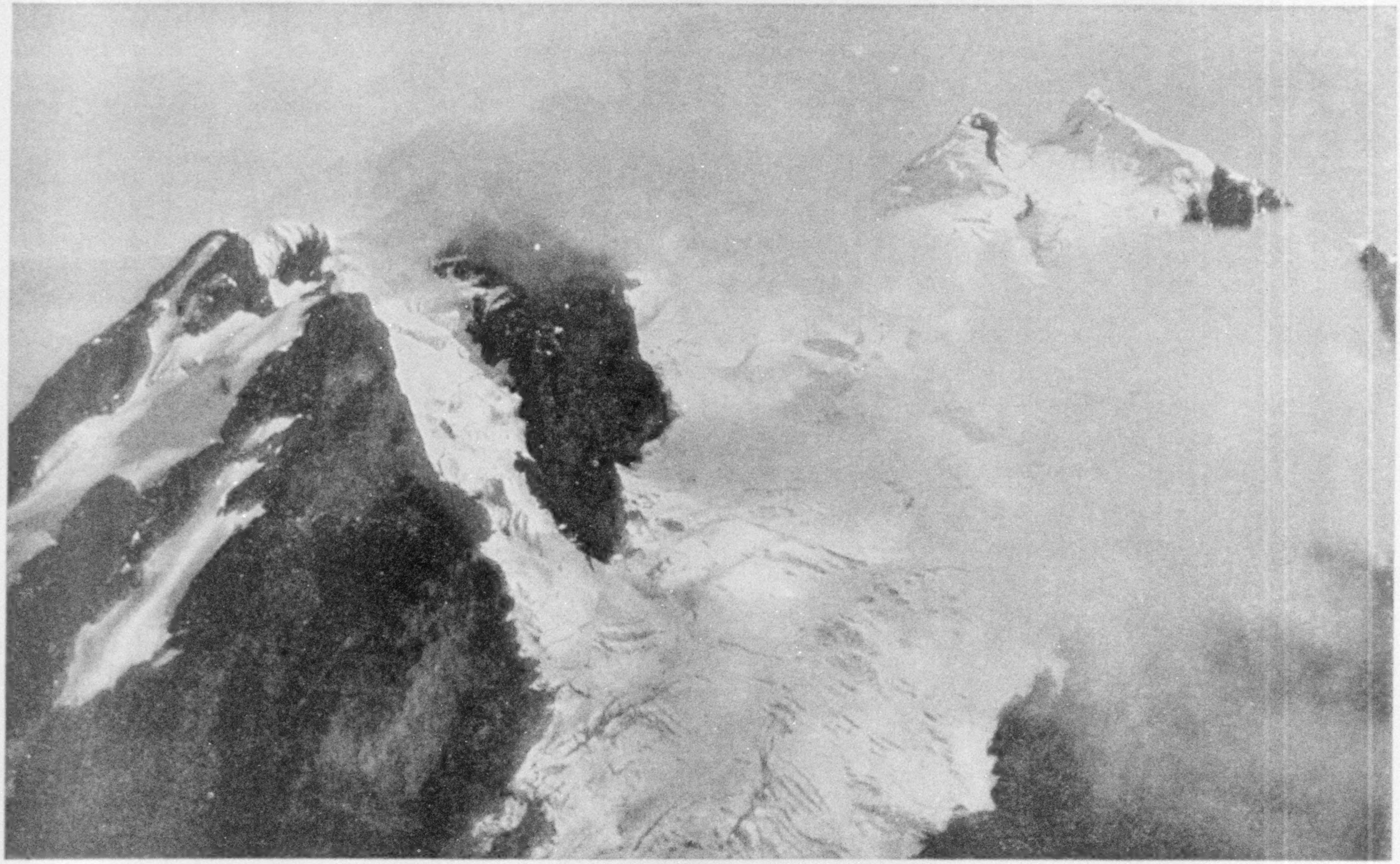
A DANCER "YIPS" WHEN SHE IS PLEASED WITH HERSELF

A Sudanese official who was there told us that when pleased we should advance and lift the performer's arm and hold it aloft, after the Roman style. Porter tried her luck. She stepped in and held aloft the arm of the woman who seemed to know herself so intimately.

Photograph by Vittorio Sella

A TRAIL UNDER THE CANOPY OF A UGANDA FOREST

The Uganda Protectorate is rich in timbers of both the tropical and temperate zones. Through many of its dense woods it is impossible for the white man to penetrate without a pioneering party to cut a way. Paths such as that shown in the illustration are maintained by natives, who pay their taxes to the colonial government by waging a perpetual warfare on the encroaching jungle (see text, page 146).



Photograph by Vittorio Sella

MT. STANLEY OF THE RUWENZORI RANGE

Old geographers filled the center of unknown Africa with high mountains. Modern exploration has shown that Africa is devoid of ranges like the Rockies, the Alps, or the Himalayas. The Ruwenzori chain, about 50 miles long and 25 miles wide, is the only very high nonvolcanic formation on the continent. Mt. Stanley, named for the explorer, is the central massif of the range. Three of its peaks are here shown: Savoia is veiled by a cloud, Alexandra holds the center, and Margherita, at the right, attains an elevation of 16,815 feet.

Photograph by Vittorio Sella

THE ETERNAL SNOWS OF RUWENZORI, ASTRIDE THE EQUATOR, IN AFRICA

The muddy Nile has little resemblance to sparkling mountain streams, yet the snows of Ruwenzori feed its main branch. The Ruwenzori range seems to be Nature's experiment to see what will happen when a snowcapped mountain block is set down on the Equator under the sun's concentrated glare. Its permanent cap of snow, although close beside the Cape-to-Cairo route, is rarely seen by travelers. So constant are the rain clouds around Ruwenzori that the fact that it was snow-crested was not known until years after its existence was established.

Photograph by W. D. Young

A WAKAMBA FAMILY AT HOME IN KENYA COLONY

Huts of Negro tribes in Africa are practically always of beehive shape, but they differ in details. An African residence inside is usually a collection of posts. These serve not only as roof supports, but also as uprights for partitions. In large huts natives often curtain off with bark cloth sections for a goat stable and other divisions for sleeping quarters. The center may be devoted to one or two fireplaces.

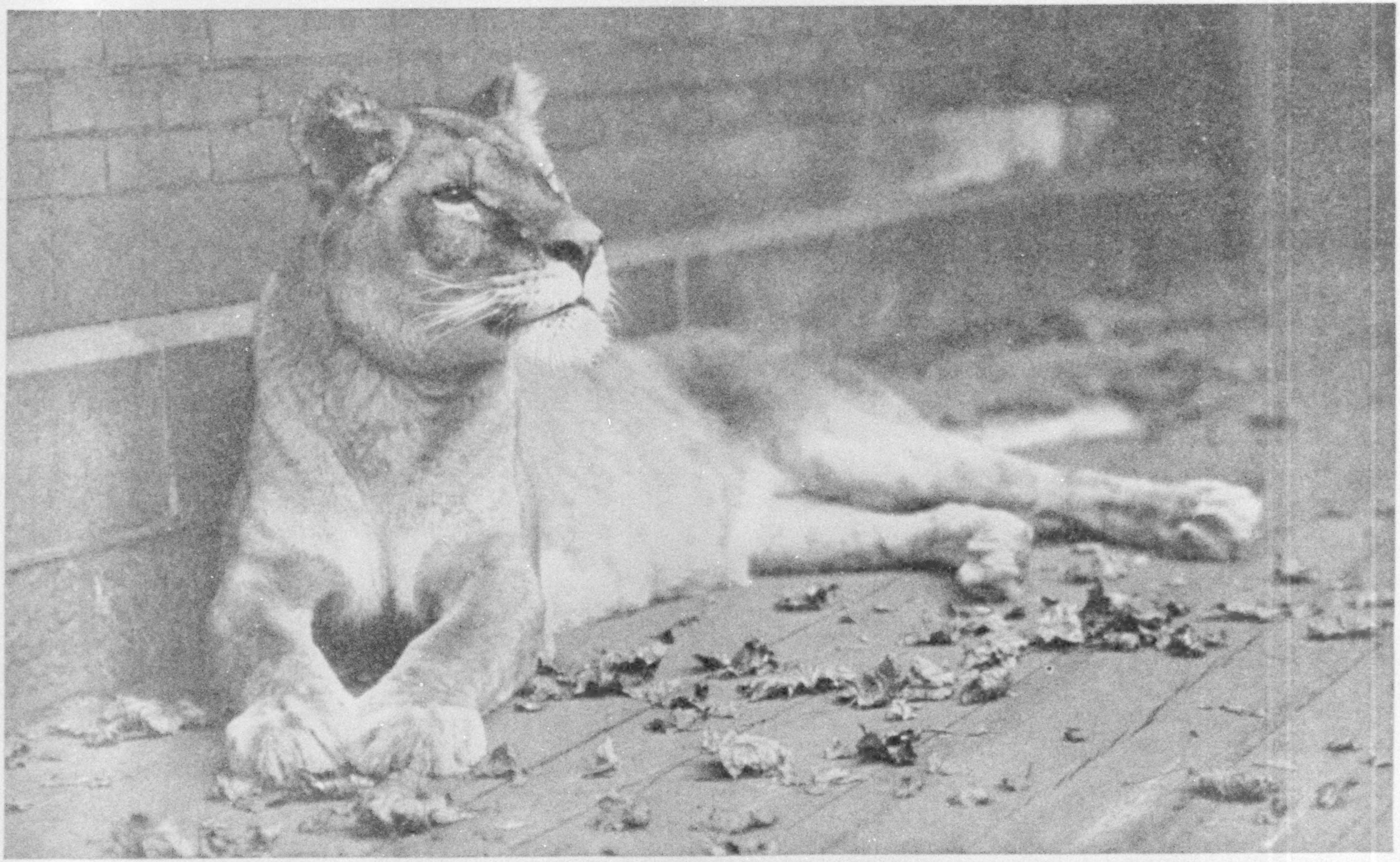
Photograph by Vittorio Sella

A WRESTLING MATCH BETWEEN UGANDA PORTERS

Probably the first thing the African native looks to the outside world for, if he looks at all, is cotton clothes. Almost anything is acceptable—white men's cast-offs, nightdresses, or just a few yards of goods slung on one shoulder like a skin. The women generally prefer the darker-colored calicoes. Cotton goods from the United States, England, India, and Japan reach native traders.

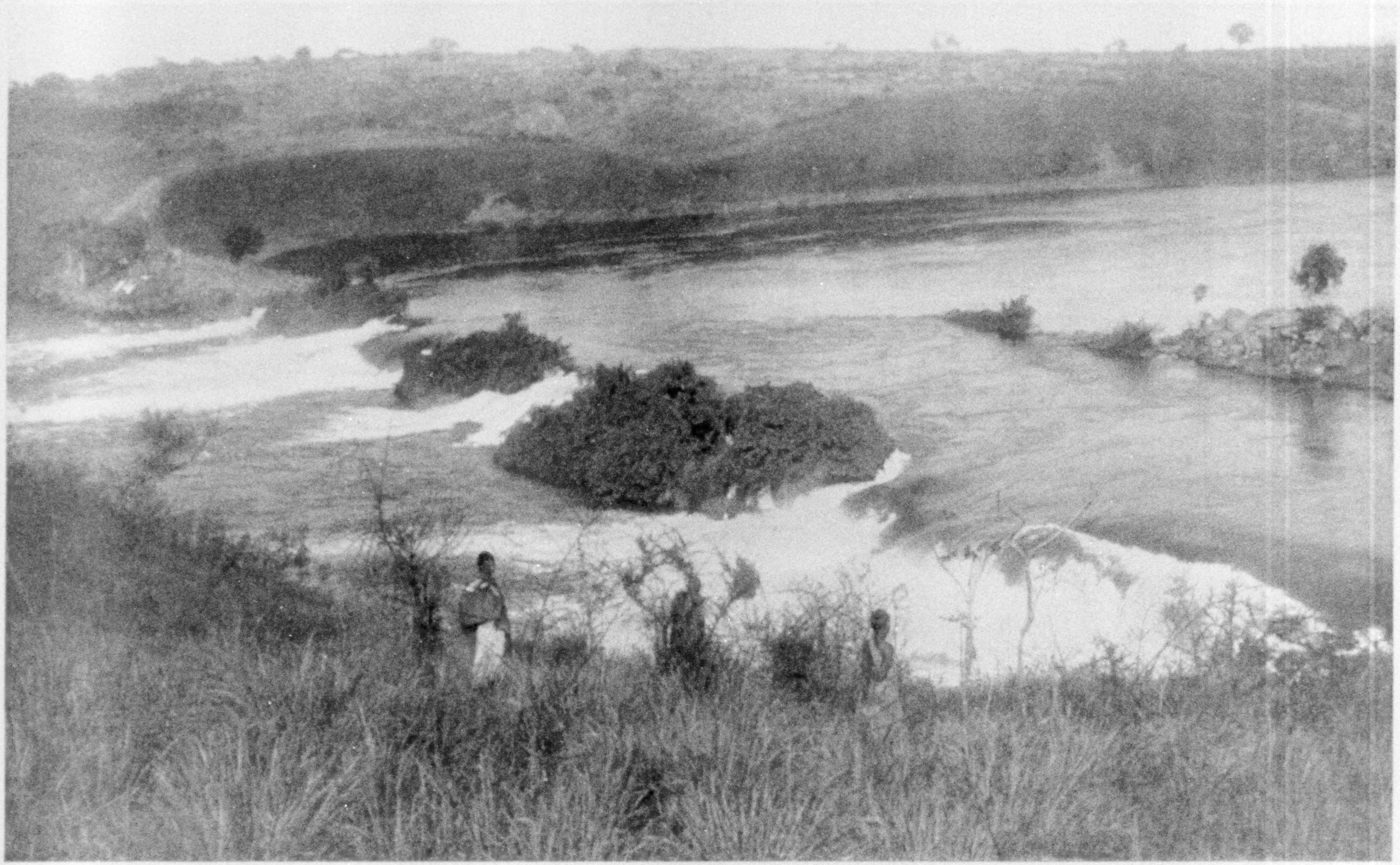
© John Graudenz

AN AFRICAN LION IN CAPTIVITY POSES FOR HIS PORTRAIT



© Arthur H. Fisher

CONSORT OF THE KING OF BEASTS



Photograph by Vittorio Sella

RIPON FALLS: THE GOAL OF MORE THAN 2,000 YEARS' SEARCH

The birthplace of the Nile, the falls at the outlet of Lake Victoria, was discovered in 1862 by J. H. Speke and J. A. Grant, two British explorers. The ultimate source of the Nile is the headwaters of the Kagera River, southwest of the lake, but Ripon Falls are generally considered the beginning of the White Nile, main branch of the mighty river. Egypt, pushing south, always wondered about the source of the Nile, the most important factor in its national life. Ptolemy, the celebrated astronomer, mathematician, and geographer of the second century of the Christian Era, made a good guess, but tropical forests and great floating islands of vegetation peculiar to the upper Nile postponed discovery. The river, whose lower valley was a cradle of civilization, was one of the last of the world's great rivers to surrender the secret of its headwaters.

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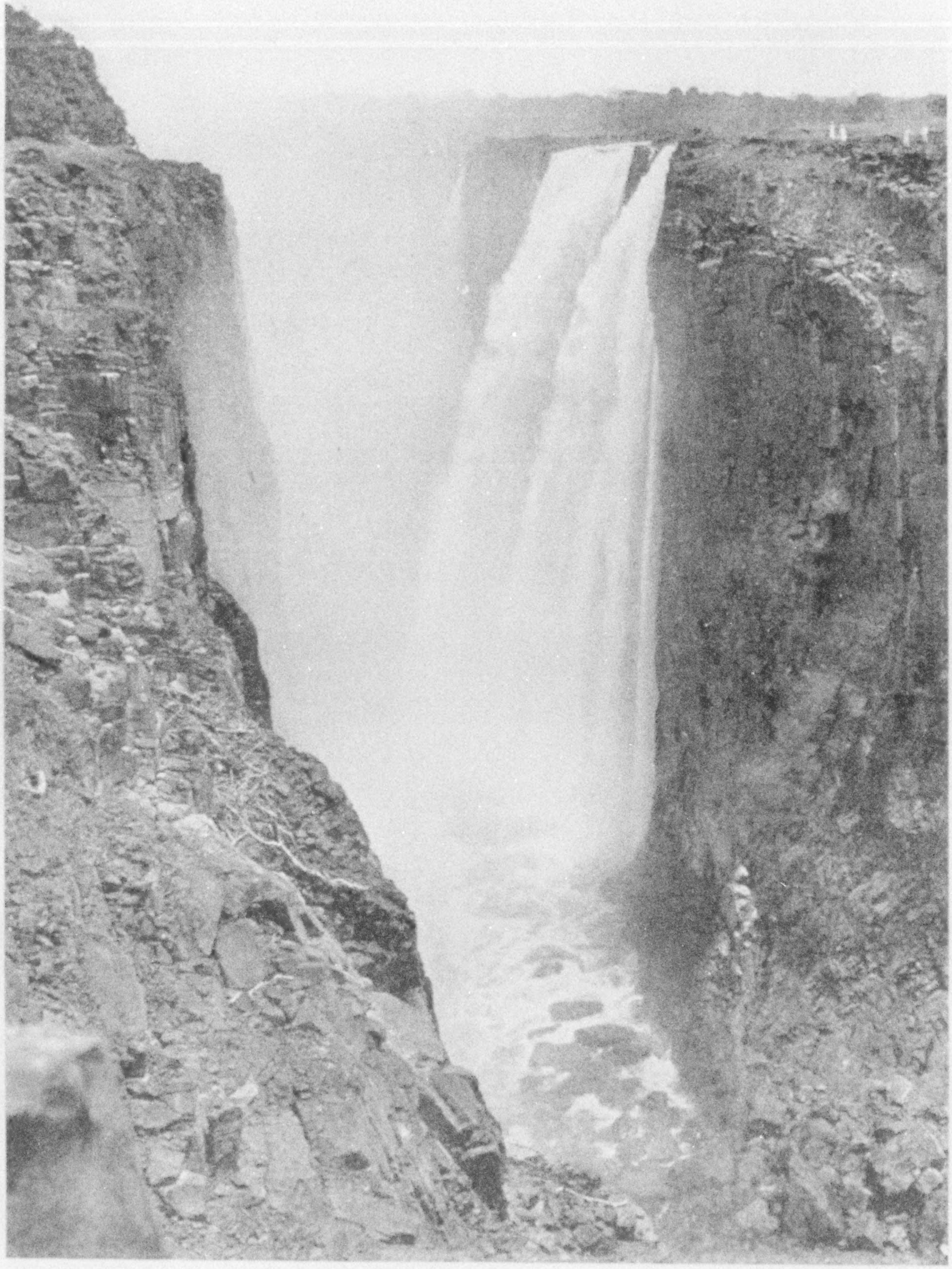
MOUNTAINS OF DÉBRIS FROM A GOLD MINE IN THE RAND, SOUTH AFRICA

Gold mining in the Union of South Africa is one of the chief sources of the country's wealth. The famous Rand of the Transvaal is a ridge of granite outcrop near Johannesburg extending east and west nearly 80 miles. Most of the other famous gold workings of the world are in quartz formations or in stream beds, but on the Rand gold occurs in sediment laid down on uptilted granite base block. The success of the Rand is not due to very rich deposits, but to regular deposits scientifically worked. Note the human figures silhouetted against the skyline.



THE CHASM AND LIVINGSTONE ISLAND OF VICTORIA FALLS FROM DANGER POINT

The entire Zambezi River seems to drop into a great chasm at Victoria Falls. David Livingstone discovered the falls, naming them in honor of Queen Victoria. Natives call the cataract Mosi-oa-Tunga, "Sounding Smoke."

THE BOILING POT BELOW VICTORIA FALLS

Like Niagara, Victoria Falls have cut a long, deep, sinuous gorge in the black basalt below the cataract. The sides and ridges of this gorge, bathed perpetually in spray, are clothed with dense vegetation, the Rain Forest.

XUM

Photograph by Vittorio Sella

THE FIFE AND DRUM CORPS OF A UGANDA CHIEF

This orchestra is somewhat heavy in wood winds. Musicians of Central Africa press a good many things into service for flutes—sorghum, sugar cane, a certain kind of reed, and bamboo. Besides drums and flutes, they also have trumpets made from antelope horns, gourd horns, a kind of mandolin, and lyres. The Uganda harp is identical in form with harps in ancient Egyptian art and affords a hint concerning the history of the natives of this region.

Photograph by Vittorio Sella

A UGANDA ROAD THROUGH A PAPYRUS SWAMP

The fanlike crest of papyrus occurs again and again as a decorative motif in ancient Egyptian architecture, much as the cup of the Nile lotus bud appears as a capital for the mighty columns. While Greece and Rome were still struggling along with the stylus and perishable wax tablets, the Egyptians were making stalks of their swamp reed into thin sheets on which to preserve written records. Our modern word "paper" is derived from papyrus.

ROCKY CANYON IN OUDTSHOORN, EAST OF CAPE TOWN

The largest ostrich farms in South Africa, where ostrich farming is a specialty, are found in Oudtshoorn. Dutch place names in the Cape of Good Hope Province are a reminder of the settlement of the Boers before their trek north into the unknown Transvaal, early in the nineteenth century.

Photograph by the Rev. Arthur J. Orner

AN OASIS OF FOREST IN THE SOUTH AFRICAN VELDT

Large timber is scarce in South Africa. Therefore the Silinda forest, covering two and one-half square miles, in the Melsetter district of Southern Rhodesia, is highly prized. The parklike Knysna forest, near the Cape, is probably the principal stand of timber in the south, while a struggling growth extends up the east coast to the Zambezi River.

A WITCH DOCTOR OF THE SHANGANI TRIBE IN SOUTHERN RHODESIA

Among the superstitious African natives a witch doctor is a person of great influence. During the tramp from Mwanza to Tabora (see map, page 128) the author, by entertaining his safari with tricks of magic, acquired a wide reputation as a witch doctor and whole villages flocked to see him at each halting place.

Immediately the black lady cried "Yip! Yip! Yip" in a shrill falsetto. It startled us. The Sudanese explained, "They *yip* like that when they are well pleased with themselves."

Just then the doctor came around to tell us the black buck chorus was singing "The White Lady is pleased with the Black Lady's dancing. (E-Yah! Boola-Boola! Wiggle-Wiggle! Walk.") Most of their songs are improvised from such extraneous, inspirational material.

'Twas a grand and glorious evening!

The party did not break up until the Count so forgot the tenets of European royalty that he commenced to dance with the natives.

While we were at breakfast in the open next morning a black girl came by with a wonderfully cicatrized body. We wanted a closer look at it, so Porter offered her some lump sugar. She had never seen lump sugar before; we had to suggest to her how to eat it. She found the result entirely satisfactory. Actually, we wished her on to ourselves for the rest of the stay there. Each hour of each day she came and begged a lump or two of sugar.

This peculiar form of decorating the body is done by slitting the skin and injecting some foreign material, which raises welts, according to a pattern, often in an elaborate raised floral design.

The Italian engineer invited us to go with him to shoot over a herd of wild elephants which made its headquarters near by, but because we did not dare miss the boat, we were obliged to remain close to the resthouse. There was no telling when the boat would arrive, nor when it would depart.

MISERABLE HOURS ON AN UPPER-NILE BOAT

The third night, at 10 o'clock, while at dinner in the engineer's shack, a whistle blew. The boat had arrived. A not-too-courteous white man who was in charge, and who was running two days late for reasons not explained, gave us just 10 minutes to pack our duffel in the dark.

Inasmuch as that particular white man was the only one of his kind we met in Africa, perhaps it is well not to discuss him. Let it suffice to say, he had stayed too long in the Tropics.

We were on board approximately within the limit.

We shoved off into the Nile in the Stygian darkness.

On board this miserable bumboat were swarms of Negroes, with this worse-for-wear white man in command. There were only two berths in the inadequate cabin. The gentlemanly captain had one and Porter got the other. The Count and I slept on deck on steamer rugs.

We tried to erect a mosquito net, as there were myriads of these winged pests, but the kindly captain refused to let us do so, as (he said) it blocked the view of the steersman. There was nowhere else to sleep. So for three nights of torture we sprawled on that hard deck and were bitten interminably by the poisonous insects.

There I contracted tropical fever, which stayed with me straight through to Cape Town and which at times made me suffer indescribably.

We were two days and three nights on this filthy, impossible boat. Meals were served by a Negro boy in scrofulous rags. Other Negroes, unspeakably dirty, crowded around the cookstove while the food was being prepared. The captain was past caring.

The rank vegetation of the upper Nile broke away from the banks in masses, dotting the stream with floating islands. Some of these islands were so solid one might camp upon them. We seemed to be sailing on a sea of lilypads.

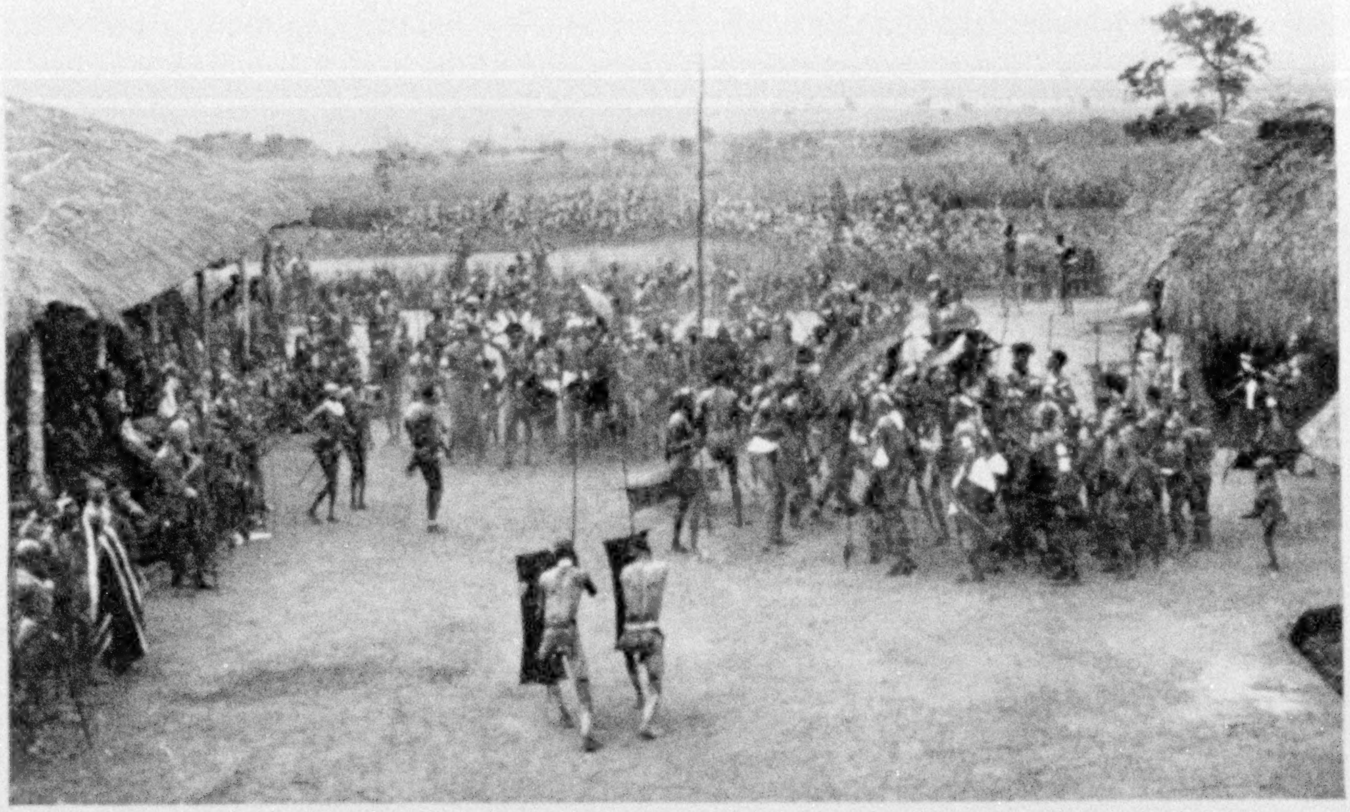
The river itself appeared verdant, marshy, and malarial. The natives of the region exist in a pitiably primitive state.

There were thousands of crocodiles and hippopotami.

At one place where we stopped to load wood, there were 300 natives waiting for the boat to take them up the river. They stood in long queues, partly garbed in skins, with baggage consisting of food, pipes, weapons, and gourds.

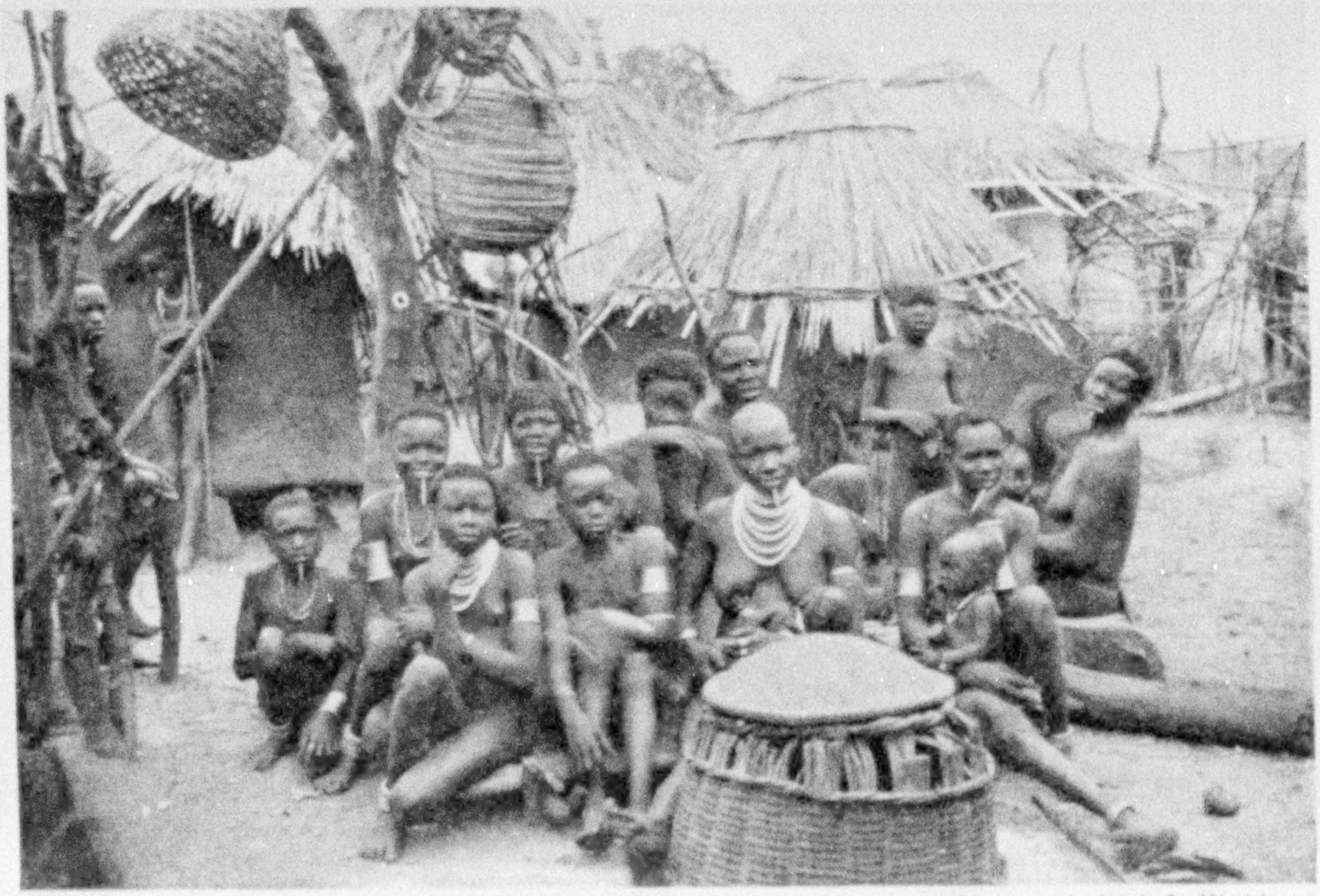
The gourds have round, flat bodies like a small pumpkin, and long, slender necks. The natives polish them with the flat of their hands until they take color like a fine old meerschaum pipe.

The captain of our boat left the blacks where they were. He refused to take



THE FAVORITE AMUSEMENT OF THE GANG TRIBE IS DANCING

Much care is taken by the young men in bedecking themselves for the event, in which both sexes take part. In the foreground are two spearmen advancing, as if to make an attack. In the center are drums hung on a post, which are beaten to accompany the dance.



Photographs by A. L. Kitching

A GROUP OF GANG GIRLS OF NORTHERN UGANDA

Some of these women wear in the lower lip a glass spike made out of an old bottle, which has been split in a fire and a suitable piece ground to a smooth pencil on a flat stone (see text, page 160). The crates hanging above are used in carrying fowls.

Photograph by A. L. Kitching

THREE DRUMMERS OF WESTERN UGANDA

The short drums are covered with cowhide, but the head of the long, narrow one is made of the skin of the big water lizard, or monitor. These men belong to the native kingdom of Toro, in which are the famous "Mountains of the Moon" (the Ruwenzori Range) (pp. 164-165).

any of them for passengers. When they tried to come on board, he pursued them with a heavy stick and beat them unmercifully on the shoulders. It was rather absurd to see this madman chasing 300 savages back into the jungle.

A HIPPO HUNT ON LAKE ALBERT

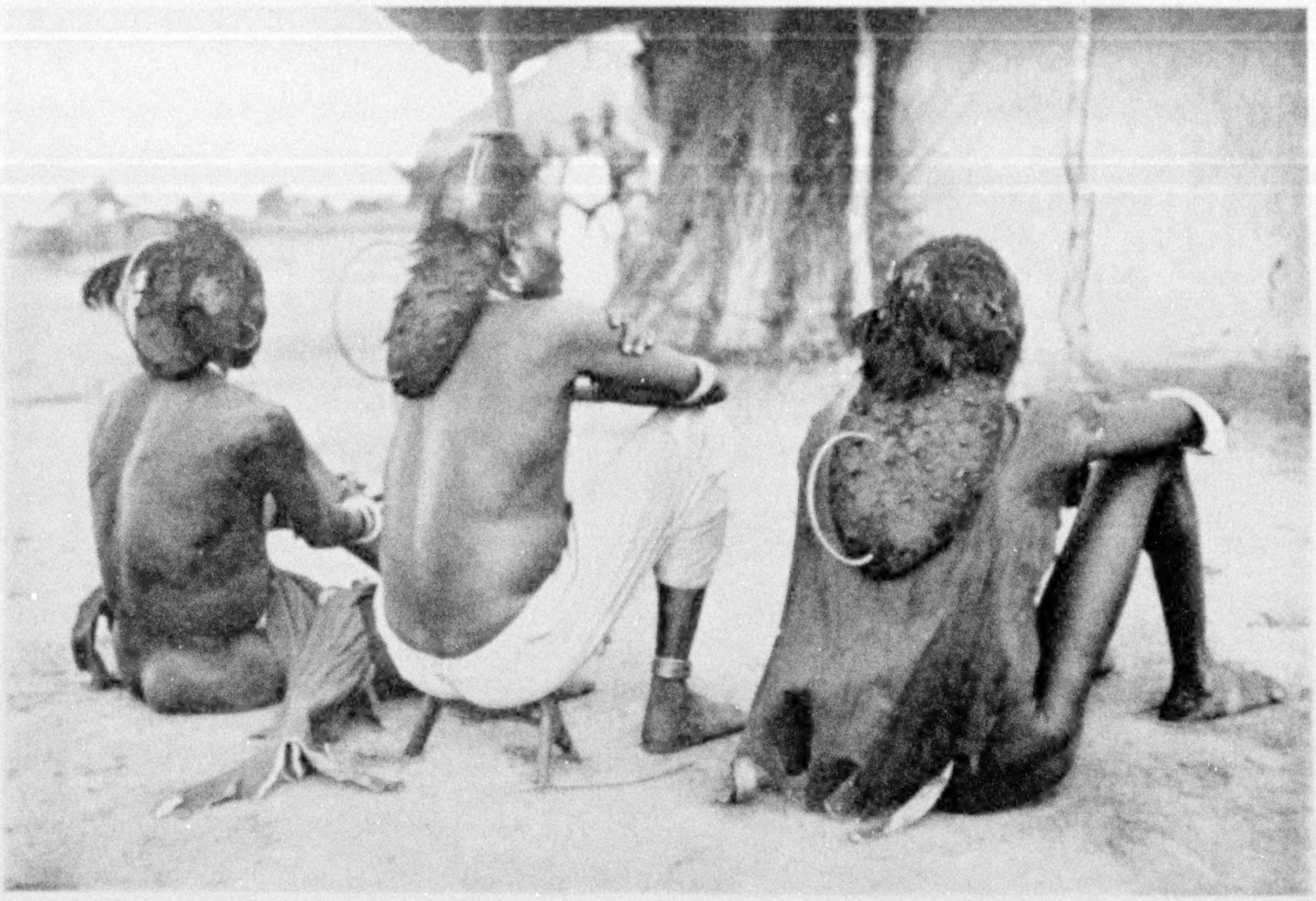
When we reached Lake Albert the captain assumed a more conciliatory attitude toward his three white passengers. He invited us to go hunting hippos. By that time I had persuaded myself that the man was full of "climate," so we went for the adventure of it; but the Count refused to go. He advised the captain pointedly that hippo hunt or no hippo hunt, he would report him promptly to his superior the minute we reached port.

In a long boat propelled by twelve blacks we pursued hippos up and down Lake Albert. The skipper's nerves were shaky. He missed his targets at all yards, from 10 to 100. That added to the sport.

Across Lake Albert, on the western shore, is Mahagi, the proposed terminus of the Congo-Nile Railroad. Some day it will be a reality. Now it is a dream on paper.

The third night we were obliged to anchor for safety's sake. Lake Albert is a very large sheet of water and often is extremely rough. The captain dared not attempt to navigate the unseaworthy craft in the dark through such troubled waters.

At daybreak we started for Butiaba. I have never known rougher going. We



Photograph by A. L. Kitching

STARTLING COIFFURES ARE THE FASHION AMONG THE TESO PEOPLE OF SOUTHEAST UGANDA

The chignon is composed of hair, collected from the heads of deceased ancestors or off the head of the wearer, glued together with cow dung or blood and decorated with feathers.

sat like introspective statues on the cramped deck. To look full at one another presented fatal possibilities.

Presently the Count succumbed; he was seasick. He moaned and insisted that he was dying, thus enabling Porter and me to smile and so save the situation for us.

We arrived at Butiaba about 8 o'clock on a Sunday morning.

FIVE DAYS OF TENNIS AND SOCIABILITY IN UGANDA

By dirt road it is some 35 miles from Butiaba to Masindi, where we hoped to catch the boat bound across Lake Kioga, at 5:30 that same day; but, because of the laziness and blundering of the unsupervised blacks, we were delayed four hours in starting.

The old, worn-out motor truck that carried the three whites and a number of Negroes averaged but seven miles an hour.

We reached Masindi just in time for early dinner. Inasmuch as we had missed breakfast through choice and lunch without choice, we were deeply appreciative of that dinner.

This country between Lake Albert and Lake Kioga is of red soil, gorgeously beautiful to the eye. Occasionally we passed coffee *shambas,* where white men were attempting to carve a living out of the jungle. Throughout the World War, when prices were high, they made some progress, but now it seems a hopeless task.

There were elephant tracks all along the road.

Due to the shiftlessness of the blacks at Butiaba and the indifference of their white superiors, we missed the evening boat at Masindi Port, with the result that we were held up here for five days.

Actually, this delay was a disguised blessing, for in Masindi we found a very comfortable little hotel, with four bedrooms, living room, and dining room. This establishment was owned and operated by a famous major, who was not only a big-game hunter of renown, but a

Photograph by A. L. Kitching

NATIVE HUTS BUILT ON FLOATING ISLANDS IN LAKE KIOGA (SEE TEXT, PAGE 186)

Between the larger huts are seen tiny shrines, in which may be placed offerings to the spirits of the lake.

lover of flowers, which grew round his place in profusion.

We were welcomed by the English colony here, some eight or ten men and three or four ladies. We introduced a new equation into their perpetual tennis games. They had played together so much they knew the possibilities of one another's games thoroughly. To introduce the unknown quantity was to create a multitude of new combinations. Much good fun resulted.

They were very kind to us at Masindi.

FATHERS TAKE REVENGE ON ELEPHANT THAT DRANK BABIES' MILK

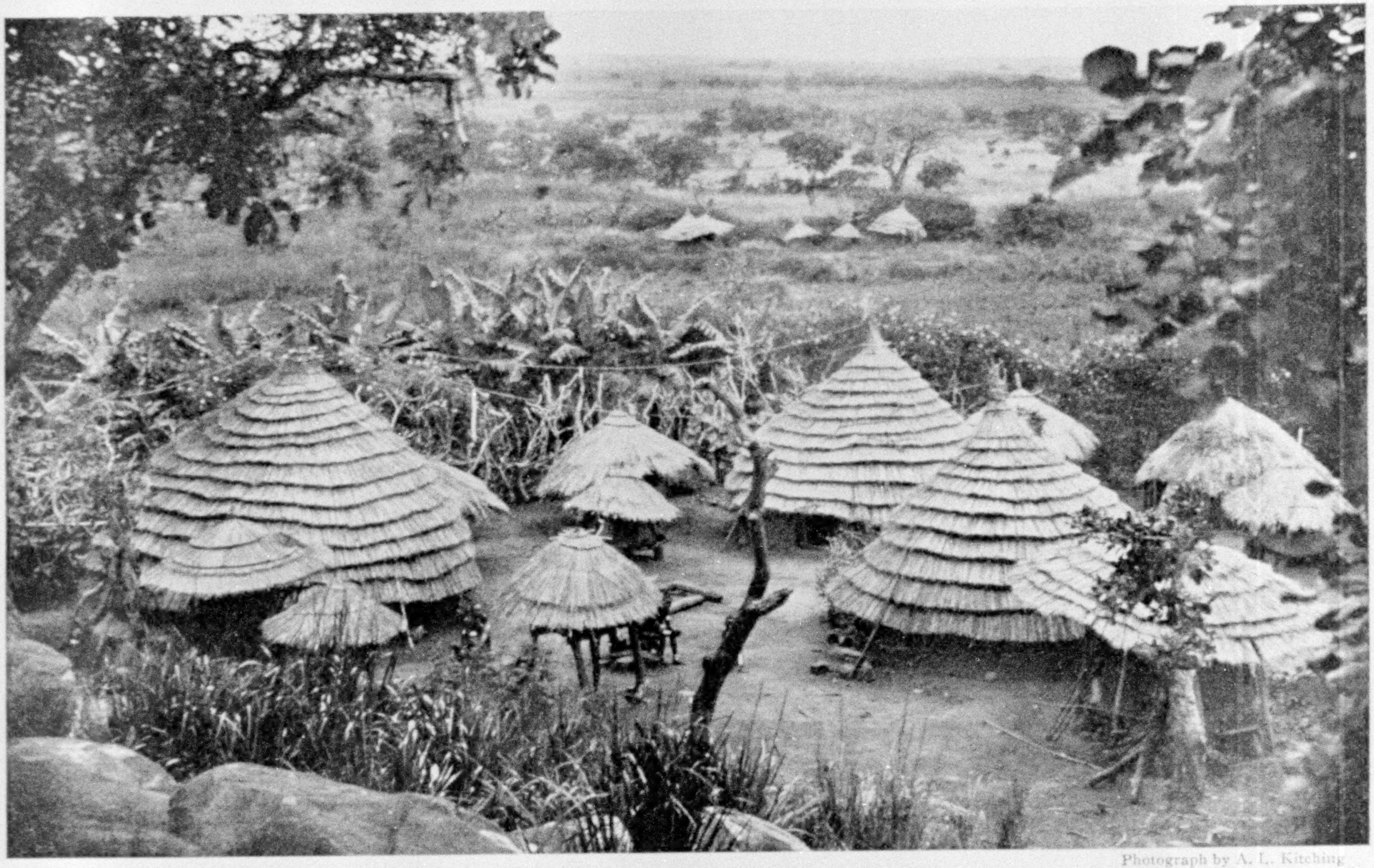
The natives of this post were a dressed-up crowd. Some say that many of these Uganda blacks are Nubians who retreated from the Sudan with Emin Pasha at the time that the Mad Mahdi broke loose. At any rate, these Masindi blacks are a generation or two ahead of the best blacks we met between there and Khartum.

Here we saw several large shipments of ivory on the way to the coast, bound for Europe (see illustration, page 158).

One night at Masindi I talked to a white man with a grievance. It seemed that a short time before a titled young Englishman had visited the post on an elephant hunt. He shot a cow elephant and captured its young one alive. The hunter fed the little one on tinned milk. It consumed a gross of these small tins a day. Before long most of the tinned milk in Masindi, originally intended for the human babies, had disappeared. To save the remaining supply, a party of fathers of infants organized a vigilance committee. Soon the baby elephant died from unknown causes.

We heard these selfsame white babies of all ages burbling to their native black boy "nurses" in the native language.

One day at Masindi one of the Englishmen and I found amusement in throwing my Australian boomerangs. The eccentric characteristic of the weapon made the natives think it was bewitched, and they scattered in wild disorder. For generations these blacks had been victimized by witch doctors, and as a consequence anything that is unusual is an object of terror to them (see page 178).



Photograph by A. L. Kitching

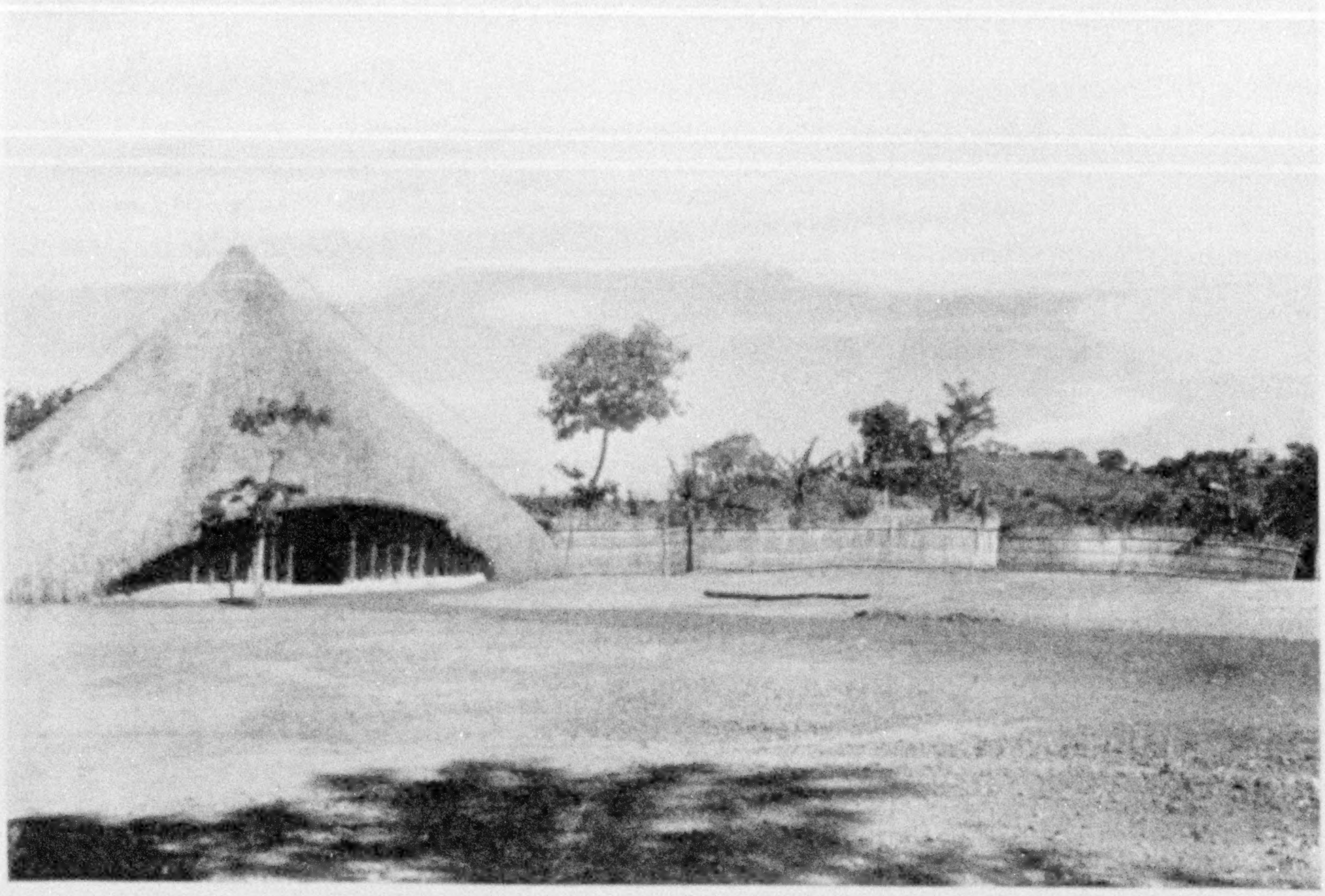
A VILLAGE OF THE GANG TRIBE, IN NORTHERN UGANDA

The smaller huts are granaries, for in the wet season, when there is no hunting, the Gang spend much time in their fields cultivating millet and sweet potatoes. The long lines hung from hut to hut are grass ropes, which are supposed to ward off lightning.

Photograph by A. L. Kitching

AMONG THE GURUGURU HILLS OF NORTHERN UGANDA

The caves in these hills were for years the resort of criminals and fugitives from justice, and a considerable force of military had to be sent by the British to "smoke" them out.



Photograph by A. L. Kitching

THE TOMB OF KING MUTESA, WHOM THE EXPLORER STANLEY FOUND ON THE THRONE OF BUGANDA (UGANDA) IN 1875

Mutesa, who welcomed Speke and Grant (see page 170) in a friendly manner, was succeeded by his son, Mwanga, who was deported by the British Government and died in the Seychelles Islands. His body was brought over and buried beside that of his father.

The boat on Lake Kioga was a clean, comfortable little craft, in charge of a jolly, efficient Scotch captain. We sailed all around the lake and stopped at many small ports to pick up cotton, in the cultivation of which the white men were trying to interest the natives. Apparently something is going to come of this campaign, because the natives are learning that the white man will pay money for cotton, and that money buys things.

There were four British traders and officials on board who had come up from Lake Victoria. Of course, they all carried guns, so we had some good sport sniping crocodiles (see page 214).

WHERE THE NILE BEGINS

Lake Kioga is a part of the Nile system.

When the river leaves the green hills of Lake Victoria, it hurries tempestuously toward the sea. Soon the land becomes marshy, and the stream must fight its way through papyrus swamps. It becomes discouraged, repents, and tries to turn back. That is Lake Kioga.

After the struggle at Lake Kioga, the Nile again finds green hills and pleasant surroundings. There it stops to rest and meditate. That is Lake Albert.

Both these lakes are really wide places in the mighty stream.

Lake Kioga was to me extremely uninteresting. The little ports were merely small wharves and cotton sheds. I developed a slight case of "sun," and that, complicated with Lake Albert fever, made me indifferent.

Here we experienced several furious tropical storms under particularly favorable conditions. We saw them coming a long way off. Then they struck us, deluged us, engulfed us. For perhaps 10 minutes we were drowned out.

When the storm passed, the air was cool.

On deck, we all admired the beautiful multicolored, iridescent African skies. There seemed to be no "roof" to them.

Photograph by A. L. Kitching

INTERIOR OF THE TOMB OF KING MUTESA (SEE ALSO PAGE 186)

The body is interred behind the line of spears and other weapons. In the aisles to either side of the lines of posts formerly sat old women, widows of the deceased monarch, who took turns in guarding the tomb.

Lazily we sailed through channels of water lilies, down the silent avenues of papyrus swamps (see page 175).

Finally we reached Namasagali and boarded the little train for Jinja, five hours away, on the shore of Lake Victoria.

The route we followed down through Africa zigzags a little, but it was always south.

After we left Namasagali we passed through a high, fertile country, dotted with banana and pineapple plantations. The banana is one of the staple foods of this region. We bought luscious pineapples from the natives for five cents each, which flagrantly overpaid them.

All the natives within walking distance of the railroad were present and accounted for when the train came in. Their impressions of civilization come to them in trainloads. The twentieth century A. D. rolled in on them unannounced and found them in the twentieth century B. C. They have not yet recovered from the wonder of it.

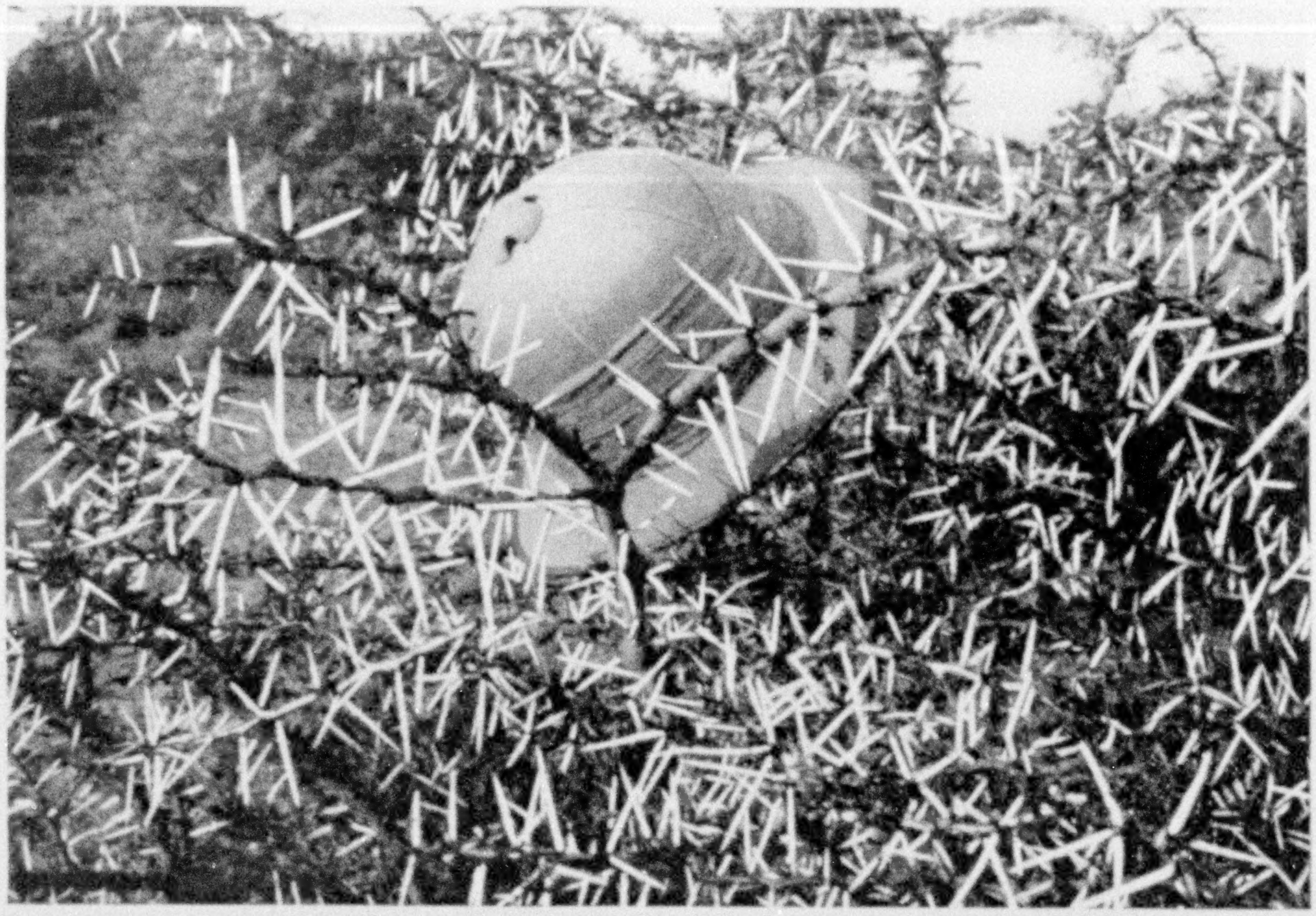
Ant hills the size and dimensions of native huts, high country of transcendent fertility, a multitude of trees, tall grass, groups of raw natives lost in wonder, and clean little railroad stations—these were the oft-repeated impressions on the road to Jinja.

The hotel at Jinja was a group of temporary structures, which is the technical name for a series of native straw-and-mud huts. Even so, the management was courteous and obliging, the food well served, the beds clean. We were made very comfortable.

ON THE SHORES OF THE SECOND LARGEST FRESH-WATER LAKE IN THE WORLD

Jinja rests on the hills over Lake Victoria. This lake is quite a stretch of water, some 250 miles long, second only to Lake Superior in size, and the source of the River Nile. While we dined we could hear the roar of the river as it broke away for its journey down into Egypt (see illustration, page 170).

Ripon Falls were something less than



Photograph by H. T. Cowling

A TOPEE IMPALED UPON AFRICAN "BARBED-WIRE" ENTANGLEMENTS

Mimosa thorn shrubs, which grow abundantly in central East Africa, are used by natives to protect their homes against wild animals. Mimosa, in the form of a palisade around a village, is called a *boma*. In killing lions a boma, or thorn barricade for a combination blind and fort, is built near the bait (see text, page 205).

a mile away. A tablet at the falls commemorates Captain J. H. Speke, the Englishman who discovered them for the European world on July 28, 1862. The falls were small and insignificant, we thought, for the source of such a river as the Nile.

Unless one wished to go shooting hippos, or buffaloes in the hills beyond the lake, there was very little to do in Jinja.

These African buffaloes are extraordinary creatures. They are not at all like the American bison. Some of them have huge pairs of horns, which grow solidly across their foreheads. They are cow-like animals in appearance, but not cow-like in disposition, for most white hunters in Africa agree they are among the most dangerous of wild beasts. Once a buffalo is wounded, he seems to run away from the hunter, but that is only a ruse. Actually, he circles round, quietly and stealthily approaching the hunter from the rear. Then, in a last furious rush, he attempts to kill his quarry. Very often he succeeds in doing so.

We found all African prices for imported goods exorbitant, and all usable goods were imported. When we reached a settlement we had to replenish our stock. For American-made goods the prices averaged three times the standard prices in America.

Wherever we went we found friendly men of our own race, who gave us information concerning the next lap of the journey. We developed a high regard for the white man who is marooned in Africa.

We waited at Jinja for the boat to take us across Lake Victoria to Kisumu, the lake port of Kenya Colony.

WORK WITHOUT NOISE IS IMPOSSIBLE IN AFRICA

In Jinja we saw a degrading sight. A number of black prisoners were chained together with steel dog collars around their necks. These men had committed only petty crimes, but unless they are chained together, they run off into the jungle whenever the opportunity offers.

These convict gangs cut most of the soft dirt roads through the jungle, and so open up the country to civilization.

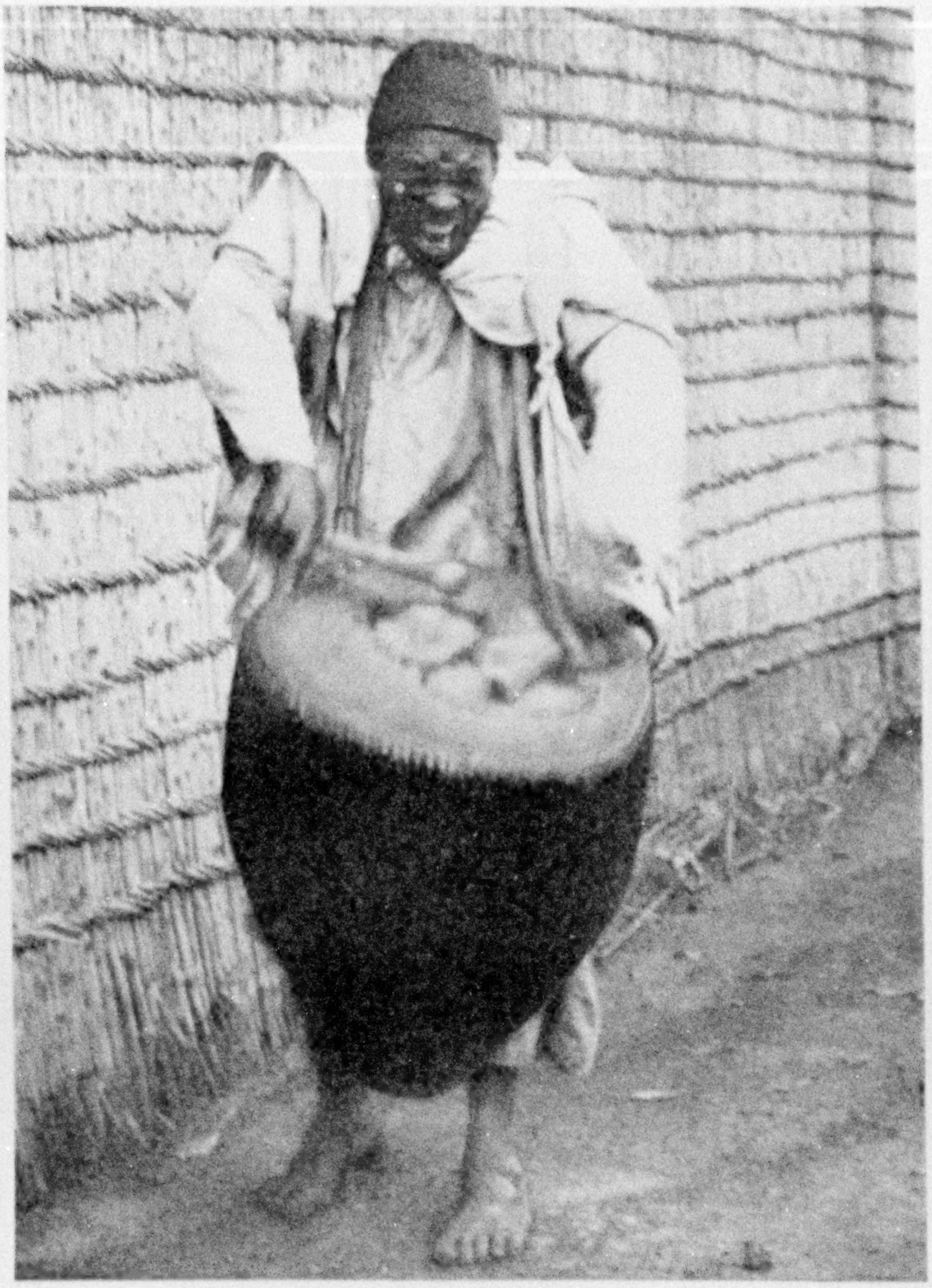
African natives find it impossible to do any kind of work except with an accompaniment of noise. When our boat, the *Clement Hill*, arrived we were greatly amused at a sight on the docks. While we were waiting for the gangplank to be let down, a group of blacks began beating improvised drums, shouting and leaping to the music.

"Who are these natives and what are they doing?" I asked a white man.

"These are the ship's stevedores. They always dance to get themselves excited, so they can work."

Here we said goodbye to the Count.

We crossed direct to Kisumu in something less than 24 hours. All the available cabins were filled with British officials and their wives, who were going home on leave, bound for the seaport of Mombasa; so I was obliged to sleep on a bench in the saloon. That did not bother me very much, because I burned up with fever all the way. In comparison, the inconvenience seemed slight.



Photograph by Vittorio Sella

A DRUMMER BOY OF UGANDA

In some African villages there are three big drums. The largest is called "Bugendanwe." Next to it is placed a smaller one, called its wife. The third, still smaller, is its prime minister. Most Uganda drums are hollowed pieces of wood with oxhide heads.

Kisumu, on the shore of Victoria, is some 3,700 feet above sea level; Nairobi is nearly 5,500 feet. Therefore when we left Kisumu we began to climb. The train mounted the Kikuyu escarpment, with an elevation of 8,000 feet, and we began to experience arctic cold, although this railroad is almost on the Equator. Steamer rugs were a necessity; I mixed chills with fever the night through.

IN NAIROBI, LARGEST TOWN OF CENTRAL AFRICA

Nairobi is the largest town in Central Africa, is a seat of the British Government, very desirably situated, and rather pretends to be a city after the tropical design, though there is nothing tropical about Kenya Colony thereabouts.

The adjacent country is mountainous. The naked native blacks seemed out of place. The English have very strenuously attempted to make the region civi-

Photograph by P. De Lord from O. W. Barrett

A GROUP OF WARRIORS IN KENYA COLONY WEARING HATS THAT WOULD ASTONISH PARIS

The Kavirondo tribes east of Lake Victoria go in for elaborate millinery. They cover crowns of basketwork with white kaolin striped with black mud. The crowns are then trimmed with ostrich feathers and plumes of other birds. The models are exclusive—no two alike. Some are more than three feet high. A witch doctor crouches in the center of the assembly. The Kavirondo have been decimated by sleeping sickness.

lized and productive, with the result that it is the best of the so-called White Man's Country in Central Africa.

Though Kenya Colony is located on the Equator, such is the altitude that the European residents have winter sports—skating, tobogganing, and skiing.

There is a distinctive kind of native in Kenya Colony.

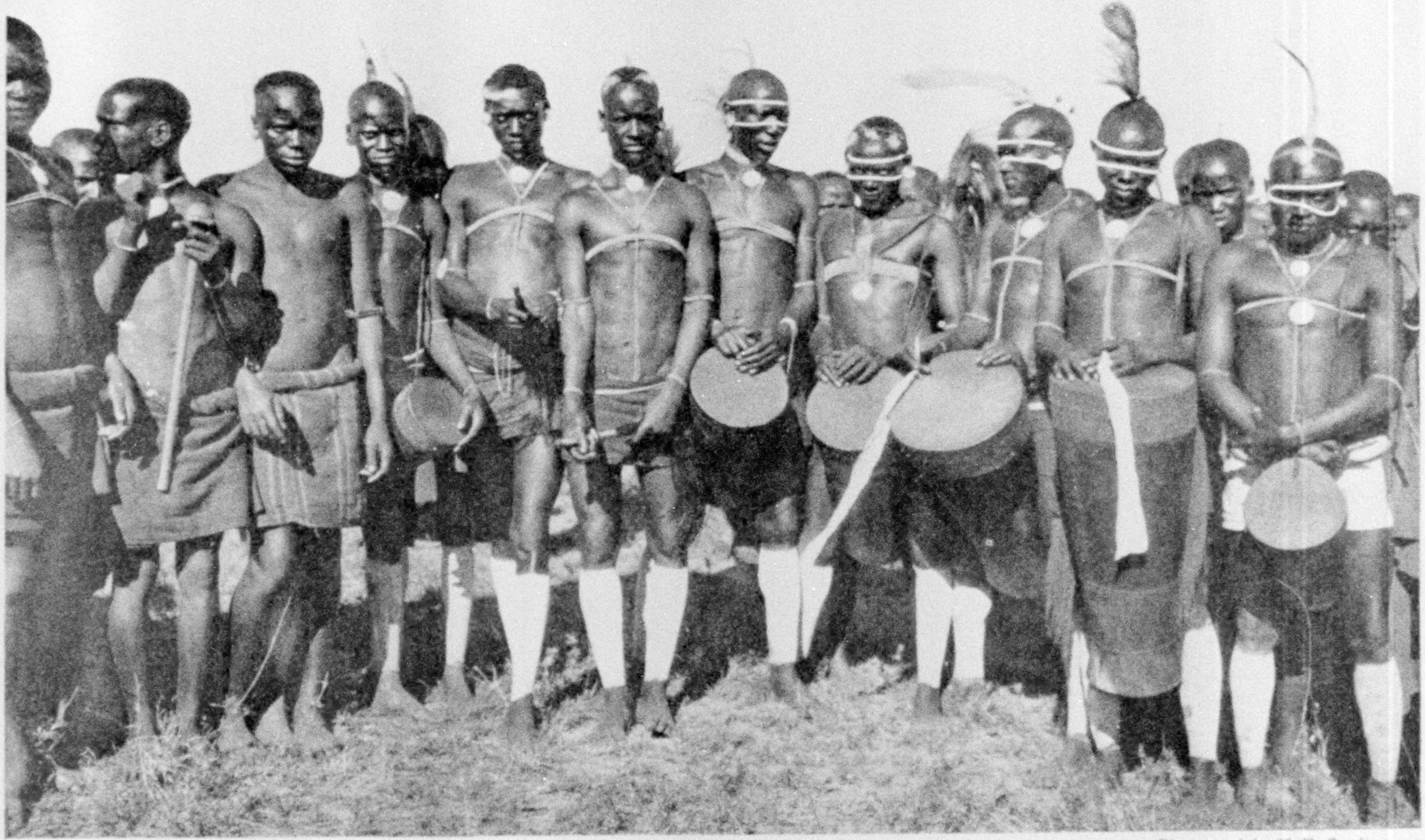
In and around Nairobi the women shave their heads and pierce and distend their ear lobes to outlandish limits. When the ears are free of decorations, these mutilated lobes hang in loops, but usually pieces of wood or metal jewelry fill the spaces. These decorations assume the proportions of saucers. Under the ear chrysanthemums of copper wire, wrapped in bright-colored silk, give a color contrast to the dusky complexion. Arms and legs are decorated with bracelets and anklets of copper wire. Over parts of their bodies, draped like a Roman toga, they wear a single garment of tanned skin of a soft brown color.

Most of the women carry burdens slung on their backs, steadied by a strap across the forehead. They stoop as they walk. One sees thousands of these bent-over, shuffling, barbaric figures (see page 205).

IN THE SHADOW OF THE ROOSEVELT TREE

In Nairobi we stayed at the Norfolk Hotel, outside which there is a tree bearing this legend: "This tree was planted by the Honorable Colonel Theodore Roosevelt." Unfortunately, it is being crowded out by another tree and is dying.

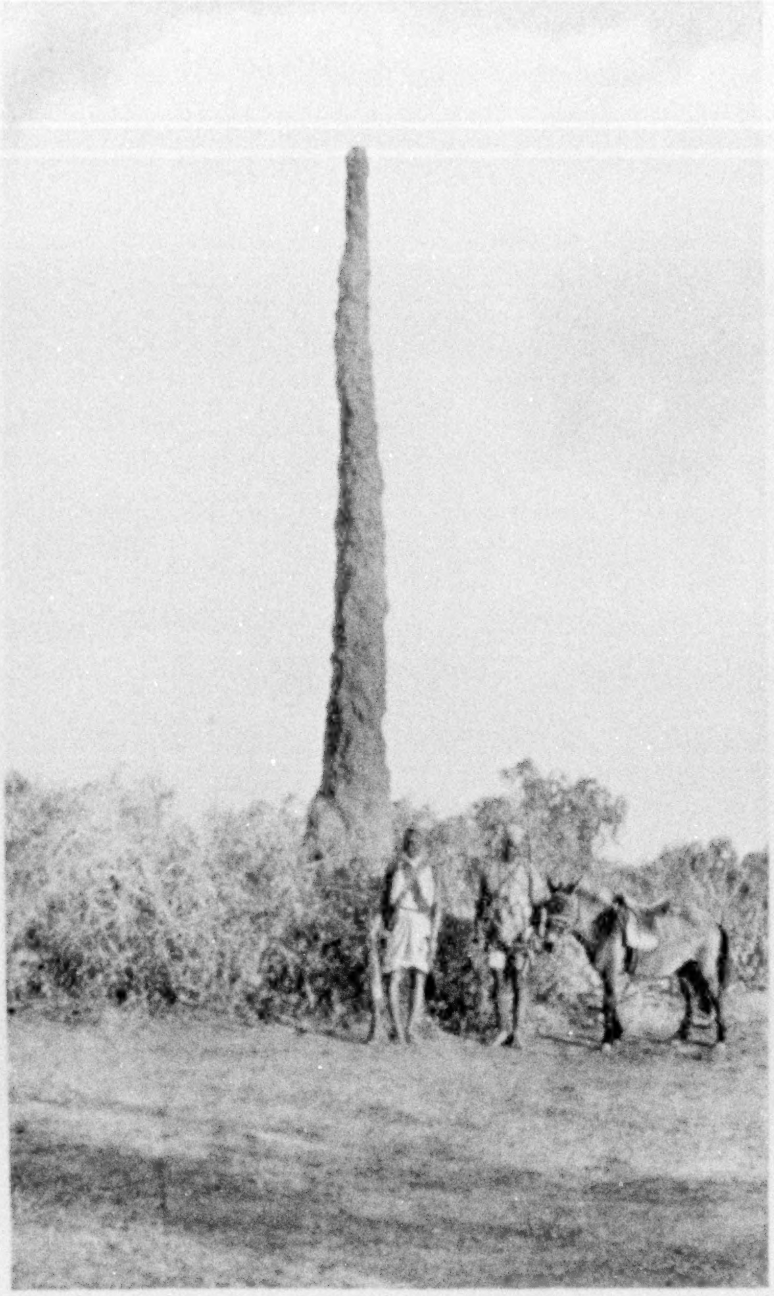
We decided, by the map, to push down through the Masai



Photograph by H. T. Cowling

THE ASSEMBLED ORCHESTRA FOR A WAKAMBA DANCE: KENYA COLONY

Drums are the only instruments necessary for a native dance, although varieties of flutes and xylophones are used. The numerous Wakamba, living in Kenya Colony, speak the purest Bantu to be found in East Africa. While there are more than 800 languages in Africa, the problem of understanding them is not so hard as their number would suggest, for many of them are dialects of Bantu; so that a native from the Cameroons usually can make himself understood by natives in the Congo, Rhodesia, or Zanzibar.



Photograph by Capt. W. Madgin

A PINNACLE RAISED BY ANTS IN KENYA COLONY

This spire was 35 feet high when this picture was taken, two years ago, and it was still going up. Towers and humps built by big colonies of white ants are familiar features of Kenya and Uganda landscapes. Some tribes relish these ants as a delicacy.

country, to the east of Lake Victoria. Whether such a route existed we did not know. We only knew that the Masai, the most turbulent tribe in Central Africa, were again on the warpath. They had killed some Hindu traders a short time before. That promised excitement.

Those whom we consulted in Nairobi said the Masai country was not safe. That made us want to go all the more. But we could not persuade a guide in Nairobi to accompany us to Mwanza, on the southern shore of Lake Victoria, as all claimed there were no paths and no water, and that the Masai were in a hostile mood.

After three days of sustained effort we became rather pessimistic. We had accomplished nothing.

Eventually we induced an English planter, who was looking for an engagement, to accompany us to the edge of the Masai country for a hunt. There we expected to discover whether it would be possible to get through.

A LION HUNT IS DECIDED UPON

When first we talked with the White Hunter, he asked us what we wished to shoot.

"Oh, we wish to shoot lions."

Up until that minute I had not thought of what I wanted to shoot. Never in my life had I gone hunting.

"Righto! I think we can find lions," he replied.

Thus, casually and irresponsibly, were we committed to a lion hunt.

We left Nairobi at 7 a. m., in a little American-made car, to cover some 75 miles, to where the lion has his haunts.

One mile outside Nairobi the road degenerated into a wagon track across low lush meadows, simply soft mud. We had chains on the wheels all day. We got stuck innumerable times. We had to get out and push. We skidded at every turn. We had three punctures.

This is the principal road in Kenya Colony.

The Masai are still the most warlike and most feared of all the African tribes. They are a cattle-owning people. They live on cows' milk and cows' blood. They consider agricultural work disgraceful. The little flour and such which they require they get by trade.

Incidentally, they have cattle tick and cattle fever rampant among their vast herds; so there is a quarantine station on the edge of the Masai country to keep their cattle and the consequent contamination out of Kenya.

This quarantine station, a one-room shed on stilts, was to be our headquarters

while we hunted lions. This saved buying and carrying a tent.

A GIGANTIC ZOO IN THE OPEN

More or less, I have seen the sights of the world, but I shall never forget the thrill as we came into the Kedong Valley, five miles from this quarantine station. I expected to see big game in Africa; I had seen some. But my idea of hunting (purely academic) was to go out and search around till an animal appeared on the horizon; then take a quick shot at it and trust to luck. Imagine, then, the spectacle of *thousands* of animals within the radius of a few hundred yards of our car, grazing peacefully, such animals as one usually sees in the zoo.

We were amazed and delighted.

We stopped the car for a better view and to hold conversation with two naked braves, who, all dressed up, were journeying toward some trysting place. Their hair, raised in pompon fashion, was matted with an oily red mud and braided into little ropes. Their bodies were painted with eccentric spirals in white. They wore rings in their noses and ears. They were very grand and very polite and very curious, especially about Porter.

Photograph by H. T. Cowling

A MASAI LION KILLER

The headdress, made from the mane of a lion, shows this warrior has killed a lion with his own spear. The Masai prefer buffalo hide for the big oval shields, but will use oxhide. The leather is sewed on a hoop, and down the center, on the inside, is a broad lath. Usually designs on the shield show the hunter's clan. The Masai of the Tanganyika and Kenya uplands are one of the fiercest tribes in Africa (see text, page 192).

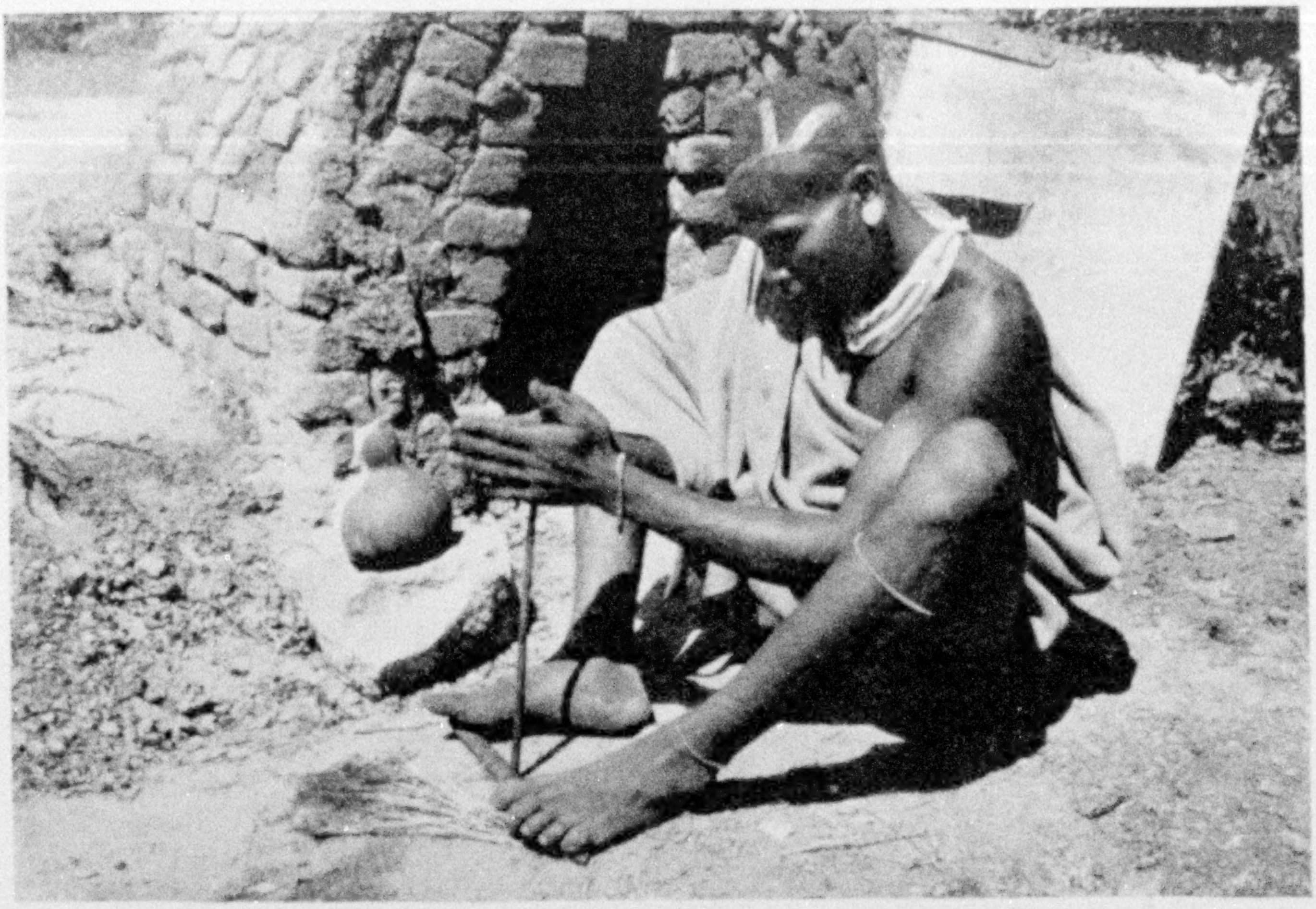
The Kedong Valley consists of a series of gently undulating plains with pocketlike grazing grounds intruding into the foothills. Occasional shaggy outcroppings of rocks, hummocks and ledges provide shelter for the game and points of vantage for the hunter.

A ZEBRA SAVES AN AMATEUR'S REPUTATION

Next morning we turned out at daybreak.

The grass, four feet high, was wet. Before we walked 100 yards we were soaked to the waist. No one cared for that, because the most interesting sport in all the world was before us. The golf mania is as nothing compared to the big-game mania.

That first morning the rising sun found the plains full of elands, kongoni, antelopes, Grant's gazelle, Thomson's gazelle, zebras, ostriches, giraffes, hyenas, foxes, wild dogs, jackals—literally, thousands of animals. We forgot that we were there to shoot and stopped in wonder to admire.



A WAKAMBA NATIVE MAKING FIRE WITH TWO STICKS: KENYA COLONY

Photographs by H. T. Cowling

ARBITERS OF FEMININE FASHIONS AMONG THE MASAI WOMEN

In some regions of Africa it is almost impossible to maintain telegraph service. The beaux and belles of native tribes are so anxious for copper wire to make into ornaments that they will raid a telegraph line if the occasion offers. Some of the most fashionably wired native women wear as much as 12 or 15 pounds of metal on each leg (see text, page 217).

Photograph by Felix Shay

MRS. SHAY'S METHOD OF FORDING A CROCODILE-INFESTED STREAM

A mile or more from the camp we came on a herd of zebras, say 70 yards away, that stood stock-still and stared.

The White Hunter suggested, "Go ahead, take a shot."

I dropped to one knee and let go.

The zebra at which I aimed kicked his heels into the air and fled to parts unknown.

One is neither discouraged nor disconcerted when one expects to miss—aye, prefers to miss—for I have not the stomach of a hunter. I hate to kill things.

On we went again, and the "honor" was now Porter's.

We turned the corner of a rocky abutment. Down below us, on the plain, 200 yards away, was a herd of kongoni, a variety of horned beast which weighs at maturity about 300 pounds. Porter sat down like a professional, leveled her gun on her knee, and promptly knocked over a large male.

First blood to Porter. We arranged the beast and photographed her and it, she trying vainly to conceal her elation. She is a Canadian and something of a big-game hunter; she gets a thrill out of it.

"Well," suggested our mentor and

Photograph by H. T. Cowling

ON A KENYA COLONY COFFEE PLANTATION

Coffee is a coming crop in Africa, the continent of its origin. Arabs are supposed to have found the variety now in principal use in the Kaffa district of Abyssinia. Other species of wild coffee trees are found in many places in Africa, and beans from some trees have remarkable aroma and flavor. Cultivation of coffee trees is now being promoted in the uplands of Kenya Colony, Uganda, Congo, and in various other places throughout Africa.

guide, "shall we have some breakfast?" We were all agreeable.

Across the plains Porter explained to me the defect in my stance, and how my gun should not have wiggle-waggled. She insinuated that I lacked poise.

Of necessity I was meek enough. One must face the facts.

Then the hunter questioned, "What is that over under that tree?" He put his field glasses on it. It was a dead zebra!

I never looked at Porter while we walked over. I was hoping against hope. Sure enough, there, dead under the tree, shot five inches behind the shoulder, was *my* zebra! Right on the center of the target!

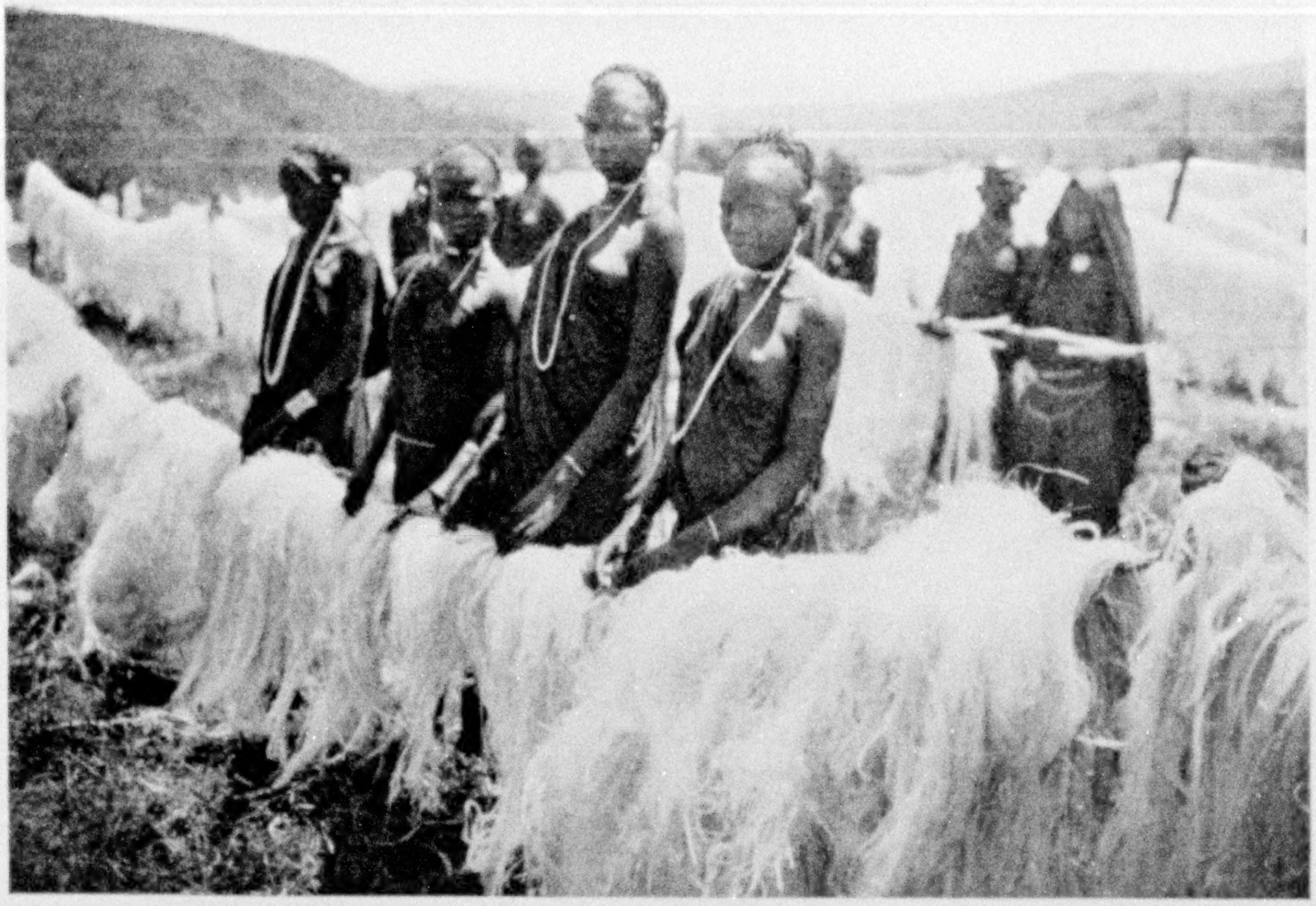
Did I gloat? No! I said only one sentence to Porter. Quietly, when the White Hunter was not listening, I mentioned that pertinent phrase, "Woman's place is in the home."

Two Kuku natives turned up at the shack. We engaged them as gun-bearers, skinners, and general all-round helpers, at a shilling a day each. This business of hunting was becoming complicated.

A SHORT HUNT MAY COST $25,000

To understand a "hunt" in Central Africa, one must understand the condition of a man's pocketbook. There are hunts and hunts!

Many rich men come out here with guns enough to start a Central American revolution. They engage a safari of 100 or more natives. They take out a dozen or more cooks, camp boys, and personal boys. They bring luxurious tents. They pack a wine cellar and multitudinous cases of food. They engage two, three, or more professional hunters—crack shots. They take along a score of beaters to find the game and drive it in. They live with as much convenience and comfort in the field as they live at home. A short hunt of this character may cost from $5,000 to $25,000.



Photograph by H. T. Cowling

DRYING SISAL IN KENYA COLONY

Sisal is a native of Yucatan, Mexico, but East Africa now exports great quantities of it to the world's markets. Africa's capture of sisal, a New World plant, affords commercial revenge for Brazil's control of coffee, a native of Africa. A native will cut 1,000 sisal leaves a day for 16 cents. The fiber is used for twine, mats, and bags.

Before I left Nairobi I told our White Hunter that we sought neither self-deception nor trophies; that we wanted sport. I told him we wanted the privilege of shooting and missing or shooting and hitting.

He was not to shoot until we had missed fair. If the animal fell, it belonged to him. We wanted none of it.

Nor were we keen on a general butchery; one or two souvenirs of the hunt would be quite enough for us.

He was glad to agree.

I find that few of these professional hunters have sympathy for wanton killing. Here, as elsewhere, the "game hog" is unpopular.

After lunch we went out to prepare the dead zebra for lion bait. To keep off the hyenas, the jackals, and the ever-present myriads of vultures, the carcass had to be covered with thorn bushes throughout the day, which were removed at dusk.

Remember, this was a lion hunt! Lions must be baited.

When the dead zebra was fixed just so, we made a 10-mile circle around the plain and saw hundreds of animals within easy shooting range, but we desisted. The spectacle of these beautiful strange animals, in their native habitat, grazing peacefully and unafraid, was rather a satisfactory adventure in itself.

Late that afternoon, at a distance of less than 50 yards, which was nothing on these broad plains, we saw five giant ostriches in single-file parade. There were three black cocks, each with a gorgeous plume of white tail feathers, and two dun-colored females. Off they stalked majestically, not at all in haste, while we sat and watched them.

AMONG THE "MAN-EATERS OF TSAVO"

That night the lions roared all around us.

One who has not heard a lion roar on the plains of Africa has not heard the most awe-inspiring sound in all the world!

Both of us had just finished reading

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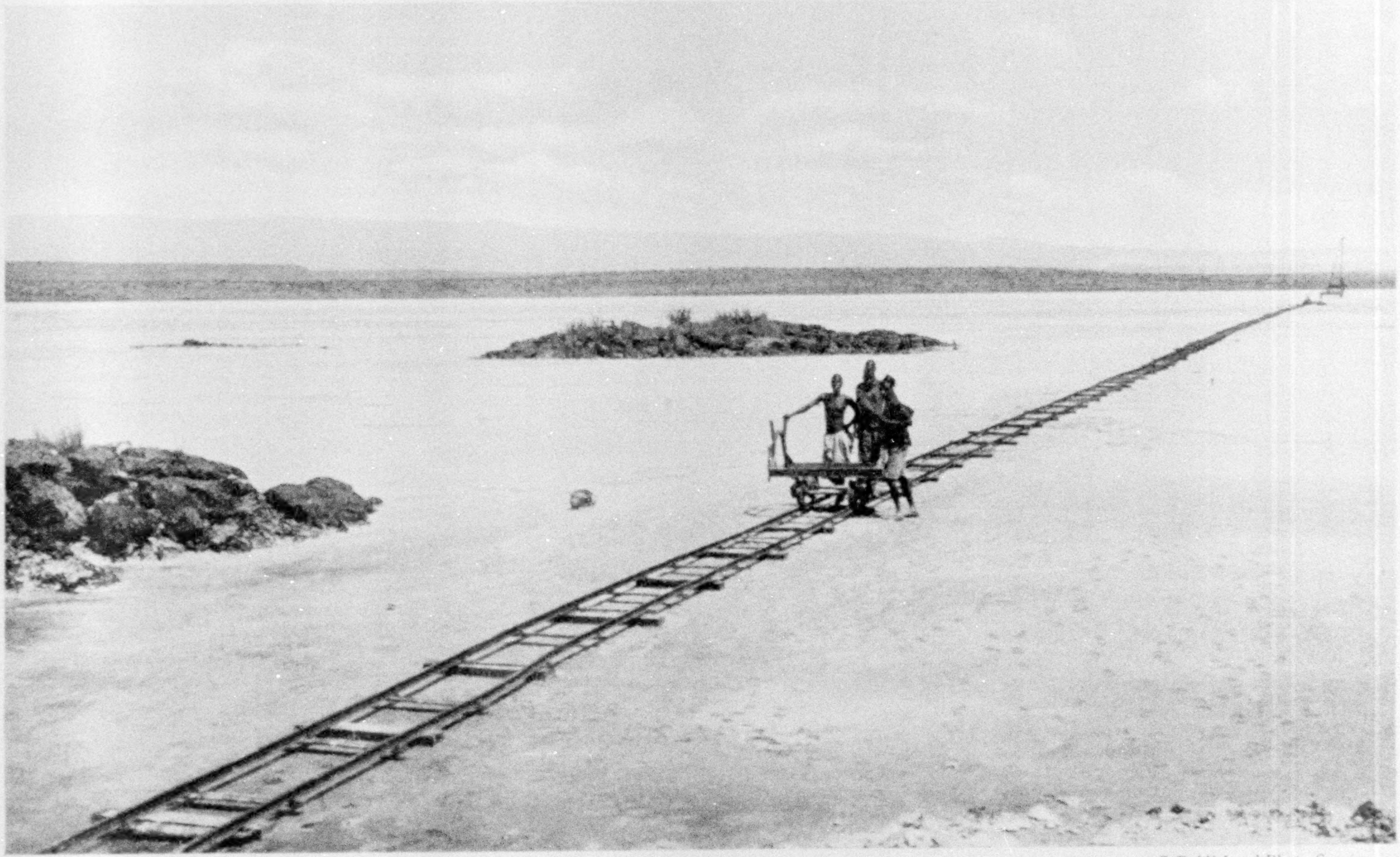
A LAKE OF CRYSTALLIZED SODA 16 MILES LONG AND 4 MILES WIDE: KENYA COLONY

A huge block of the substance has just been pried from the lake bottom. Waters flowing into the lake have brought soda in solution, and the glare of the tropical sun has evaporated the water, leaving the alkaline compound in crystal form.



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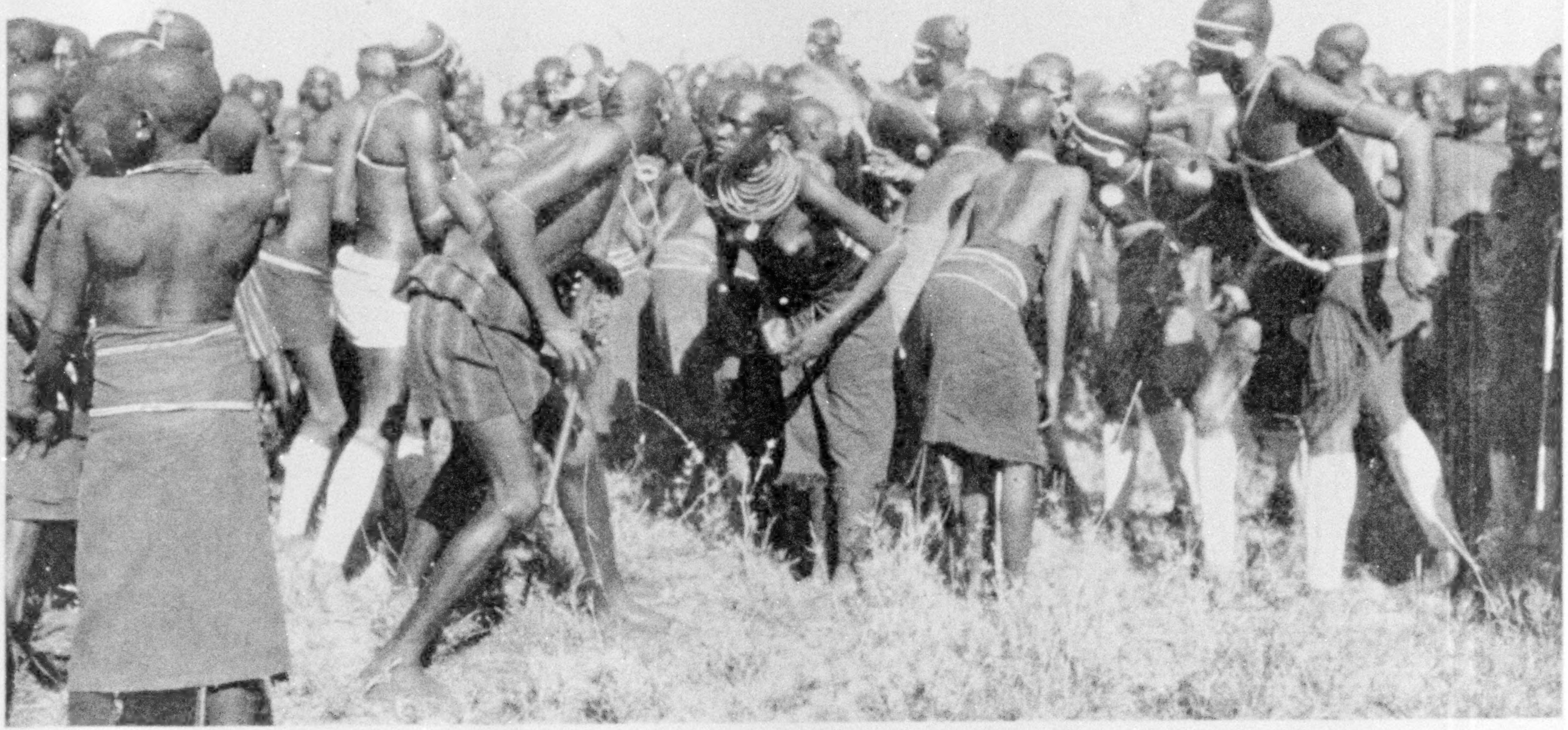
A NARROW-GAUGE TRACK ACROSS THE SODA LAKE, IN KENYA COLONY (SEE ALSO OPPOSITE PAGE)

This depression, 250 miles west of Mombasa, has enough soda to satisfy the world's needs for some time. The narrow-gauge track on the soda "ice" belongs to a British company, which is digging and marketing the chemical. The deposit is estimated at 200,000,000 tons.



Photograph by H. T. Cowling

N'GOMA, OR DANCE BY WAKAMBAS OF KENYA COLONY

Only young men and unmarried women take part in this dance. The "puttees" on the young braves are clay whitewash. When a young man manifests interest in a certain young woman, his father and her's arrange the marriage bargain. The cost of a wife depends on the bridegroom's ability to pay. A chief might have to pay 100 goats for a wife, while a poor man could get the same girl for 40 goats. The marriage price is usually paid in installments.

© Publishers' Photo Service

DANDIES OF THE KIKUYU TRIBE, KENYA COLONY

Gourds such as these four braves carry are common receptacles. Little pottery is made by African natives. Ear ornaments find great favor among tribes in this region. The man on the left wears two cylinders of wood in the lobes of his ears, which have been pierced and stretched. Women of an adjacent tribe pierce the lower lip, stretching it until it will receive a large block of wood. (See also "Curious and Characteristic Customs of Central African Tribes," by E. Torday, in THE GEOGRAPHIC for October, 1919.)

Photograph by Capt. W. Madgin

A HOME IN A TREE: KENYA COLONY

Outcasts of the Turkana tribe have taken to the trees in building houses to store away proceeds of raids. The Turkana call these outcasts People of the Trees. In southern Kenya Colony a Wakamba tribe builds shelters in trees, so that their nightly slumbers will not be disturbed by rhinoceroses or buffaloes.

Colonel J. H. Patterson's "The Man-Eaters of Tsavo." In this book the engineer who constructed the railroad from Mombasa to Nairobi relates his actual experiences with the lions that killed several white men, 28 Indian coolies, and scores of natives.

These Tsavo lions actually delayed the construction of this railroad for months, because of the panic they created among the railroad workers. This subject was eventually brought up for discussion in the British Parliament in London.

Of all the books to give one creeps, this best achieves its purpose. I fear we doughty lion hunters rather quaked between our blankets that night, when we remembered that those roars so close outside emanated from beasts whom we were to engage in the morning.

We turned out at 3:30 a. m. to catch the lion on the bait with the first flush of daylight. This meant that we would kill or be killed before sunrise—an inspiring hour!

I carried the gun that delivered the heaviest blow, a .375 express rifle of English make. Therefore I was to have first shot.

Once in for it, I resolved that my first shot must do the work. It is a notorious fact that a lion charges when wounded, and he moves with startling speed. His ability to cover the first 80 yards in no time defies the imagination. One must see him do it.

All hunters agree the lion can overtake any animal in a race of 80 yards or less. For that distance he is the swiftest animal alive. After that, he tires rapidly.

The unbroken trail led through the high, wet grass. It was still dark. A large black form loomed in front of us. "Sh! What is that?" Up went the rifles. By the slant of the back of the animal silhouetted against the sky, one could tell it was a giant hyena.

Other hyenas and jackals skulked by.

That they were off the bait told us convincingly that a lion must be on it.

By Jove, this *was* sport! This WAS a thrill!

THE LION PRESENTS A TARGET

The morning was cold, *cold*. The East African days are burning hot, and the nights are freezing cold. We wore "woolies" and heavy clothes, but we were cold. We blew on our hands to warm them, the better to grasp the rifles. Another five minutes and we would be there!

Photograph by H. T. Cowling

THINKING IS NOT THE ONLY FUNCTION OF A HEAD IN KENYA COLONY
(SEE ALSO PAGE 205)

Unexpectedly we took the last rise in the land and came in full view of the bait.

"There he is! *Shoot! Shoot!*"

There he was, and no doubt!

Resting flat on the zebra was a full-maned, full-sized male lion. The grass was too high to drop to one knee. I had to shoot from the shoulder. He glared at us, but did not move. I put my rifle to my shoulder, said a short prayer to the God-of-things-as-they-ought-to-be, and fired.

The big beast offered me a full side shot, a still target at 60 yards.

I aimed steadily, confidently, for the vital spot, just behind the shoulder. I fired and I missed!

I did not know I had missed. Naturally, I thought I hit him. I was concentrating on another problem. With the first bullet fired, I pumped the magazine to throw out the old cartridge. Out went the old, but the magazine of the gun, which the dealer in Nairobi assured me was in "perfect condition," refused to function.

The cartridge did not jam; the weak spring of the magazine simply refused to throw the next cartridge into the barrel.

I could not look up; the task was under my hand!

I plunged my thumb into the magazine to stimulate the spring, and took skin off the thumb without result. I swept my hand into my pocket, found a loose cartridge, snapped it into the barrel, and

Photograph by K. Kittenberger

FEEDING A MONTH-OLD RHINOCEROS BABY

The rhinoceros is widely distributed in Africa south of the Sahara Desert, except in the Congo Basin. Although they are divided roughly into the black rhinoceroses and the white rhinoceroses, the latter are less numerous. In color they are actually black and less black. Parties of lions will attack a calf rhinoceros, but an adult fears no animal.

looked up. I expected to find the lion in front of me, asking, "Am I too late for breakfast?"

While I was struggling with the gun I dimly heard a rattle of musketry. To me it seemed a long way off and far removed. I disassociated it with my dilemma. When I looked up, there was Mr. Lion scurrying over the far hill, with bullets to left of him, bullets to right of him, bullets in back of him. Both Porter and the White Hunter had emptied the magazines of their guns while Mr. Lion buck-jumped through the grass.

Then the two guilty ones turned on me and wrathfully accused *me* of missing the lion! Well, there are times when one can not condescend to argue.

WE BUILD A "BOMA"

That day we were in a furor of excitement.

To kill a lion became an obsession.

Lesser animals were suddenly unattractive.

Immediately after breakfast we went out to kill another zebra for bait, and, if possible, to effect the kill in a particular locality, so the bait would be located favorably.

This was no easy task. The zebras refused to come or to be driven where we wanted them. After two hours of stalking them ineffectually, we held a conference. We decided to kill one in the open and then engage native oxen to draw it a couple of miles across the plain, thus leaving a line of scent, and place it exactly where we wanted it. We scattered to get close to a zebra herd a mile away in the open.

Porter and the White Hunter shot simultaneously. The latter dropped his with a bullet through the heart, while Porter turned her zebra over twice with a bullet head-on through the chest.

Then we hailed a Kuku native in a red blanket, who lived in a near-by grass hut. He found the necessary oxen. These were attached to the two zebras and they

were dragged to high land, where there were some thorn bushes and small trees.

We planned to build a *boma*. To make the structure seem natural, the near-by landscape must be similar.

A boma is a small-sized fort made of thorn bushes, in the form of a complete circle. It is supposed to protect the hunter from the lion. The lion is supposed to fear it as a trap. We could only trust these suppositions were correct.

We planned to sit up all night in the boma, with the bait in front of us, and wait for the lion to come along and settle down to the banquet. Porter was to have first shot, and—well, I could only think thoughts of pity for that lion.

Mentally, I began to select places for the lion's skin on our living-room floor at home.

We wended our way back to the shack for lunch.

Photograph by H. T. Cowling

A KENYA WOMAN WITH A DOUBLE BURDEN

The strap support over the head is widely used in East Africa to supplement thongs over the shoulders. In consequence women, who do practically all the burden-bearing, are often permanently stooped (see text, page 190).

Along the trail we scared five little foxes out of the bush. They were no larger than house cats.

In the afternoon, we refrained from shooting, in order not to frighten off the prospective lion. We took a preparatory nap instead.

When the sun set we started for the boma, with a steamer rug each, as protection against the damp and cold.

Once in the boma, we must be as still as death itself. That's an easy task for an hour. But not to speak, not to stir for ten hours—! That night I kept the faith faithfully, but I am through with bomas forever and a day.

Even so, the long night out on the plains with thousands of animals prowling about, the strange and threatening noises, the queer sounds, the smells, the silence, the vastness, the eerie moon—these are to me an unforgettable memory.

THE AUTHOR SHOOTS HIS LAST GAZELLE

Once in the night a circle of little jackals came around and yipped at us. Once a hyena laughed near by. There was something suggestive in his laugh. The

Photograph by Vittorio Sella

A LATEEN SAIL ON LAKE VICTORIA

Among the world's fresh-water lakes, Victoria is exceeded in area by Lake Superior only. It is the chief reservoir of the Nile, and from Ripon Falls, the lake's outlet, to the mouth of Egypt's mighty river the water route is longer than the distance between New York and San Francisco.

lion never came. Porter never killed it! The rug in the living room will have to be an afghan from Peshawar.

Meanwhile, I resolved to get a pair of gazelle horns for the family carving knife and fork.

At 200 yards, I was offered a shot at a Thomson's gazelle, a male with very nice, long horns. These little creatures are about the size of a goat, with a black and white stripe down the dun-colored side. The Tommie would only give me his tail to shoot at. He looked back over his left shoulder with a critical eye. My companions waited fretfully while I took his measure.

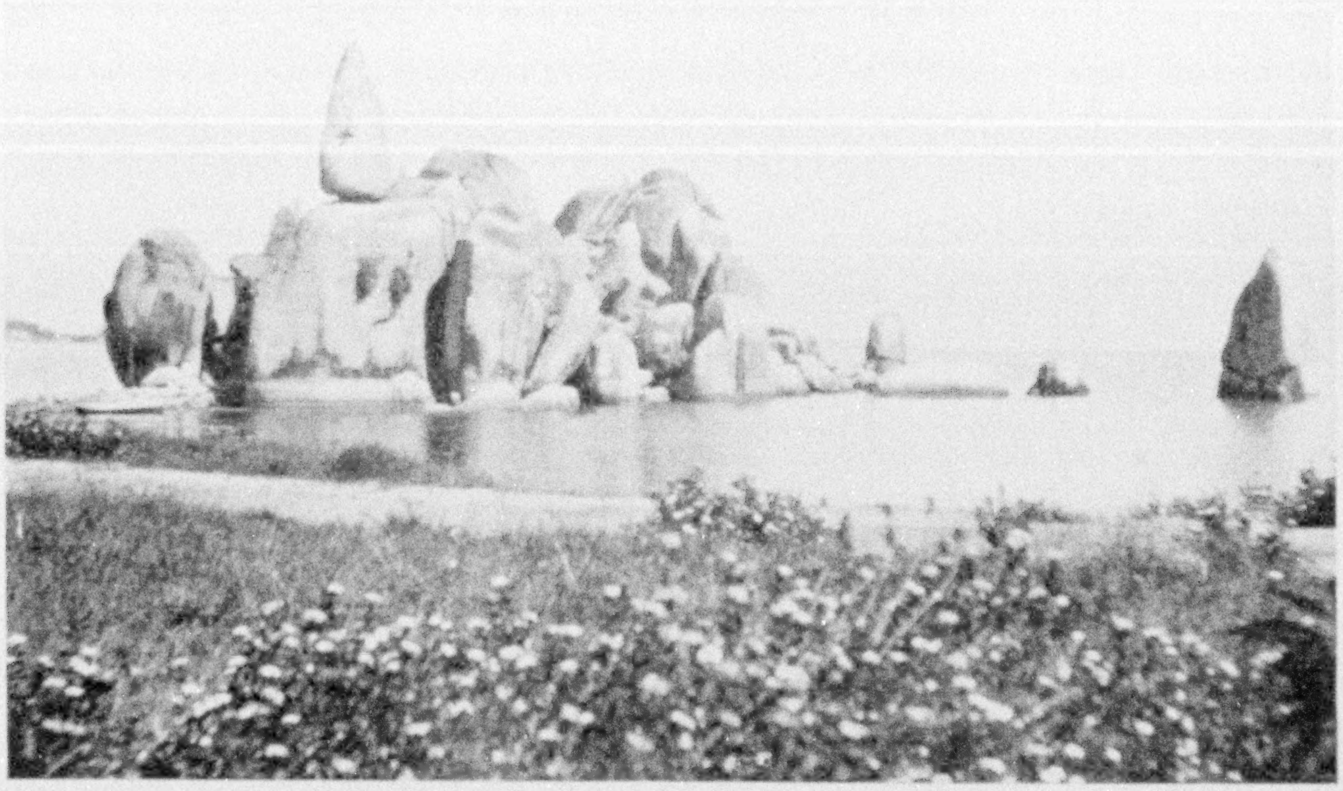
Then I let him have it with the heavy gun. I hit him in the hind quarter. The bullet ricocheted and pierced the brain. He died instantly. My reputation as a hunter was restored and on this planet I have shot my last gazelle. Alive, they are beautiful, graceful little beings; dead, they are gory masses.

Each morning we hunted lions without success. Between times we shot several varieties of horned beasts, enough to supply us with fresh meat and a few trophies.

One day as we strolled about the plains we fell in with a monster mother giraffe and her young one. The mother moved off, but the silly youngster stopped to look us over. He halted within 30 yards of us. An hour later we encountered eight giraffes, six grown ones and two youngsters. What beautiful creatures they are!

The head of the family, a gigantic male, moved forward to inspect us. These animals are royal game in Africa; a hunter is required to have an extra-special license to kill them. Therefore, they have been shot over very little, and as a consequence are unafraid. The old male, a wonderful fellow with large, brown spots, and a white head, came as near as 40 yards, and gazed at us quizzically over a tree top.

Whenever we fired a shot on the plains the rumble of the animals' hoofs running



Photograph by Felix Shay

GERMANY'S HELGOLAND ON LAKE VICTORIA

"A short distance offshore is a sizable island, with picturesque boulders thrown about in confusion. There are hundreds of balancing stones, caves, and lookouts. During the World War the Germans scanned the lake from this vantage point until they were driven out" (see text, page 210).

for cover (or distance) sounded like thunder.

Africa is a marvelous country.

We were sorry to finish the hunt, but we had killed all we wished to kill *except* a lion.

We decided to move upcountry for a day to hunt around for baboons. We did not desire to kill them, but we did wish to get close and spend a day among them.

The most relentless hunter will not shoot a monkey or a baboon, if he can possibly avoid it. When hit they cry like babies and try to tear the bullet out of the wound with their hands—a very unpleasant experience for the hunter.

AN INVITATION TO ESCORT SLAYERS TO TRIAL IS DECLINED

While we were at the quarantine shack an American missionary, who had spent 10 years in the Masai country, arrived one evening in an oxcart. He had been "gee-hawing" for 12 hours. We invited him to dinner. He told us there was no road or path through the Masai country to Mwanza. And even if a path existed, there was no water!

So that was that—the final word!

We would have to sail down Lake Victoria to reach Mwanza, in what was once German East Africa.

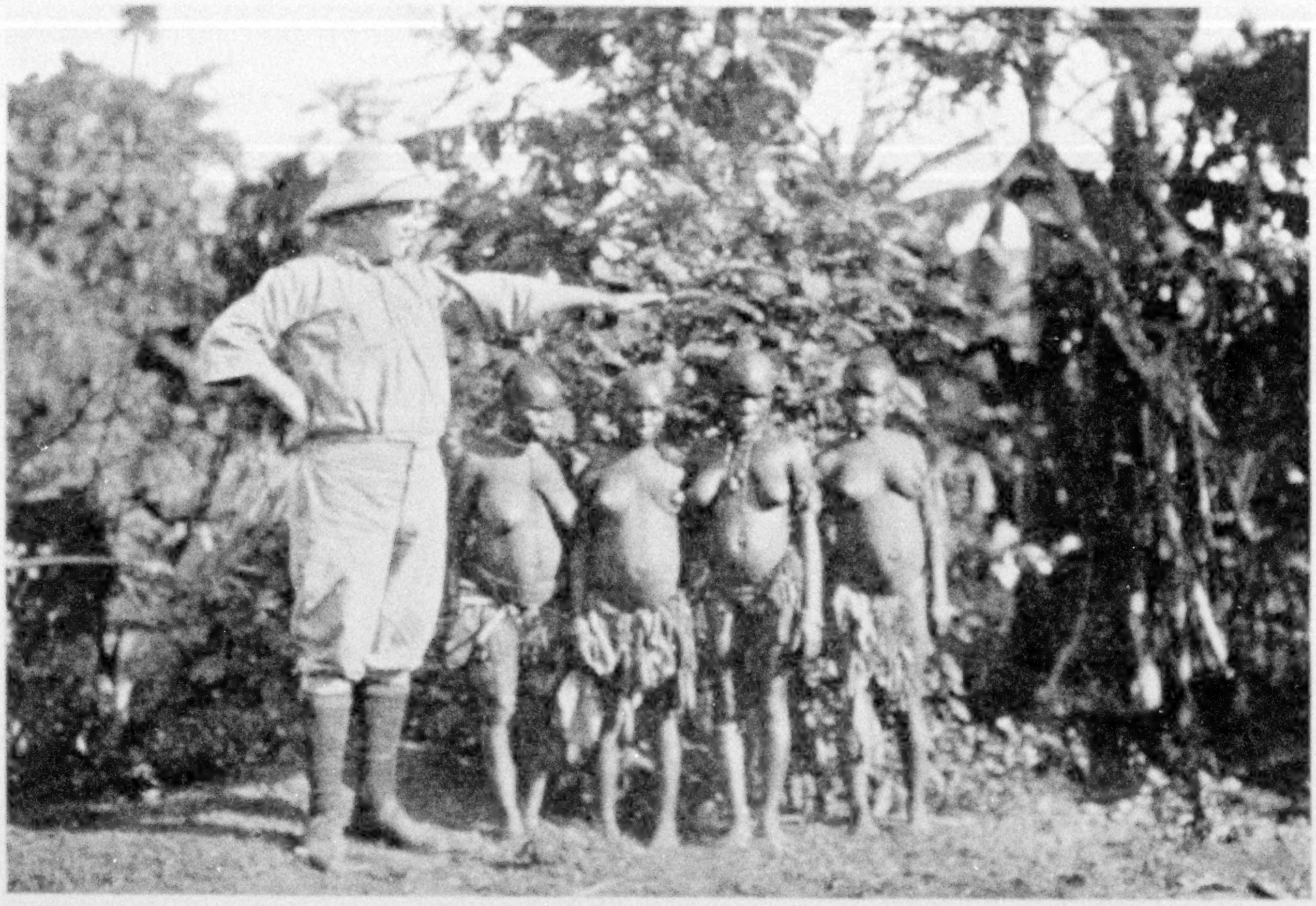
While we were at the quarantine camp a British officer arrived with a company of native soldiers. He was trekking down into the Masai country to bring up in chains 175 of the warpath tribesmen. The trouble for the present was finished. One or more East Indians and several natives had been murdered. Five or six of the 175 Masai would pay with their lives. The tribe had been fined 10,000 cattle. The Britisher invited us to go along with him. The trip might take a couple of months.

Suppose at the last moment the warlike Masai decided they would not have the criminals taken out of the country? Then there *might* be a scrimmage.

AMONG THE BABOONS OF KENYA

We wished very much to go, but we remembered we were bound for Cape Town. Instead, we went after baboons.

These little "old men" of the forests live on rocky hillsides which are densely wooded. If there is a stream near by, so much the better.



© Famous Players-Lasky Corporation

LADIES OF LILLIPUT

Although they are often no larger than an eight-year-old American boy, Pygmies dare to hunt elephants. Stealing on a herd through the grass, they bring their quarry to earth, hamstringing it with a quick knife slash (see text, page 145). The Pygmies of the illustration belong to the Bambute tribe of northeast Belgian Congo.

We found them along a stream, under thick foliage.

We three went in at different places. I crept along the bank, and soon I saw a male and a female walking toward a tree. They were upright, but slightly bent over. They walked slowly, like centenarians. I shouted and struck a bush. Immediately the tired figures became chain lightning. They went up a tree and into another, and another, and were gone in a flash of a second.

Then the forest woke up and barked at us.

Baboons utter a single, sharp, harsh bark, oft repeated.

One old man came out on a tree near us and yelled a challenge at us. He barked and barked and lost his temper and acted disgracefully. We decided he was showing off before the monkey villagers, so we sent a shot far over his head to reduce his ego. He nearly died of nervous prostration and fell down half the tree getting away.

Months afterwards, in South African newspapers, we read of the trial of the warlike Masai. These natives hold that a man's not a man until he puts blood on his spear—human blood. Until he kills, a youth is not a brave. That custom still prevails. Usually, the girls taunt the young bucks who have *not* qualified. That starts the trouble. They go out then to show the stuff that's in them, and the first person they meet dies.

Some dozens of the Masai who were involved in the killing of the East Indians were deported; seven were condemned to death. Among the condemned men was Chief Medicine Man. So great was the fear of his "evil eye" that natives refused to testify against him in court until he was forced to turn his back to them.

Two dozen of these same Masai slept on the dirt under the raised quarantine shack every night we were there.

PREPARING FOR A 300-MILE TRAMP

One curious feature about Africa is that the Sudan, Uganda, Kenya, Tangan-

Photograph by Porter Shay

THEY COULDN'T RESIST A SWIMMING HOLE

"Up in the Sudan, and here in Tanganyika as well, whenever we reached water the boys took off their loin cloths and went in for a swim. Only one out of a dozen seemed able to swim. The rest simply paddled and bathed" (see text, page 221).

yika, Rhodesia, and South Africa, all under the British flag, are governed as separate countries. As we entered each we were obliged to pass through customs.

We crossed Lake Victoria from Kisumu to Mwanza, a journey of 48 hours, in the company of a Scotch captain, a Scotch engineer, and as pleasant a group of white men as one could hope to meet anywhere. The day we tied up at Mwanza a British officer, who had spent some years in the United States, came on board and insisted that he had the right to be our host; but before Captain Bruce would let us leave he called out his small boat and took us to some of the rocky islands near Mwanza, where we picnicked and hunted iguanas. Some of these giant lizards were five or six feet long and six or seven inches in diameter.

These islands were covered with wild orchids.

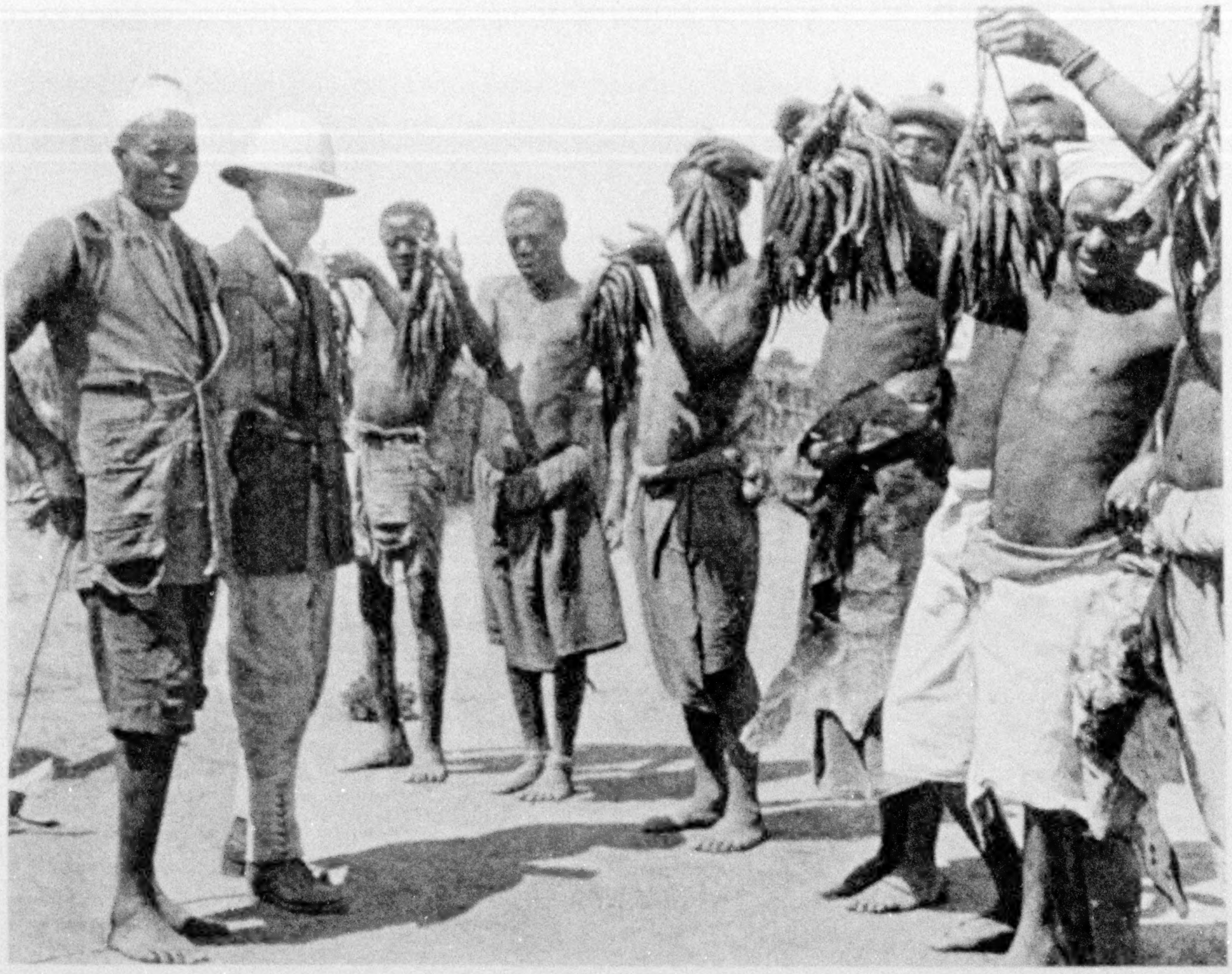
From Mwanza to Tabora, up south through Tanganyika, we were obliged to walk a distance supposed to be 300 miles. Apart from our camp beds, kettles and pans, and the ever-trusty revolver, we had no other camp equipment.

We were told on board the boat to "see Bolini." Bolini is an Italian, a trader, and the oldest white settler in Mwanza.

Our friend the British officer found Bolini for us.

Bolini kindly lent us a tent, which we were to send back to him by our black boys when they returned, after we had released them at Tabora.

Certain of the white men whom we had met in Kenya Colony advised that we take a *machila* (a hammock) on this long march; but Porter would have none of it. She insisted that she was going to walk, and that she did not want a machila with us, lest it raise the question as to whether



Photograph by Porter Shay

A TANGANYIKA TERRITORY FISH STORY WITH EVIDENCE

"When we came to a certain stream of flowing water, some of our boys waded in to their knees and with their bare hands proceeded to catch about 25 fish each" (see text, page 221).

or not she did walk. So, though Bolini offered us one, we declined it with thanks.

Mwanza, in Tanganyika, is the principal port for this territory on the south end of Lake Victoria. Viewed from the lake, it is a pile of massive granite rocks, on top of which is a kind of fort. This was formerly a German stronghold.

A short distance offshore is a sizable island, with picturesque boulders thrown about in confusion. There are hundreds of balancing stones, caves, and lookouts. During the World War the Germans scanned the lake from this vantage point until they were driven out* (see illustration, page 207).

There was a statue of Bismarck in the dusty public square, but recently, on the British sovereign's birthday, the marooned Englishmen, in a spirit of levity, took down the statue and put it in the compound of the public jail.

HOSPITALITY IN THE HEART OF AFRICA

We stayed in Mwanza four days.

The night of the first day Bolini, aided and abetted by the other white men of the station and the ship's officers, gave a little dinner in our honor. Bolini served roast suckling pig and Italian wine. I am afraid we did not turn in until late.

The Englishman who had spent eight years in the United States, largely in California, insisted on talking American slang, strictly of the pre-war period. Much of it was so obsolete it was doubly funny.

This same Englishman turned over the living room of his house to us for a camp. In these far-off places it is common practice for an individual to supply his own bed and his own chairs. For four days

* See "Transporting a Navy Through the Jungles of Africa in War Time," by Frank J. Magee, in THE GEOGRAPHIC for October, 1922.

Photograph by Felix Shay

BREAKFAST OUT IN THE BLUE

Stopping for food and rest on the trail to Tabora, Tanganyika, after a march before dawn. Tanganyika, one of the territories over which Great Britain holds mandate by virtue of the Versailles Treaty, was formerly German East Africa. The wise traveler with a safari starts early in the morning and allows a long rest period at noon. In the background is a baobab tree (see also page 231).

we wrecked his home management and his official schedule. We ate his food and used his boys. Actually, he pretended that he liked it.

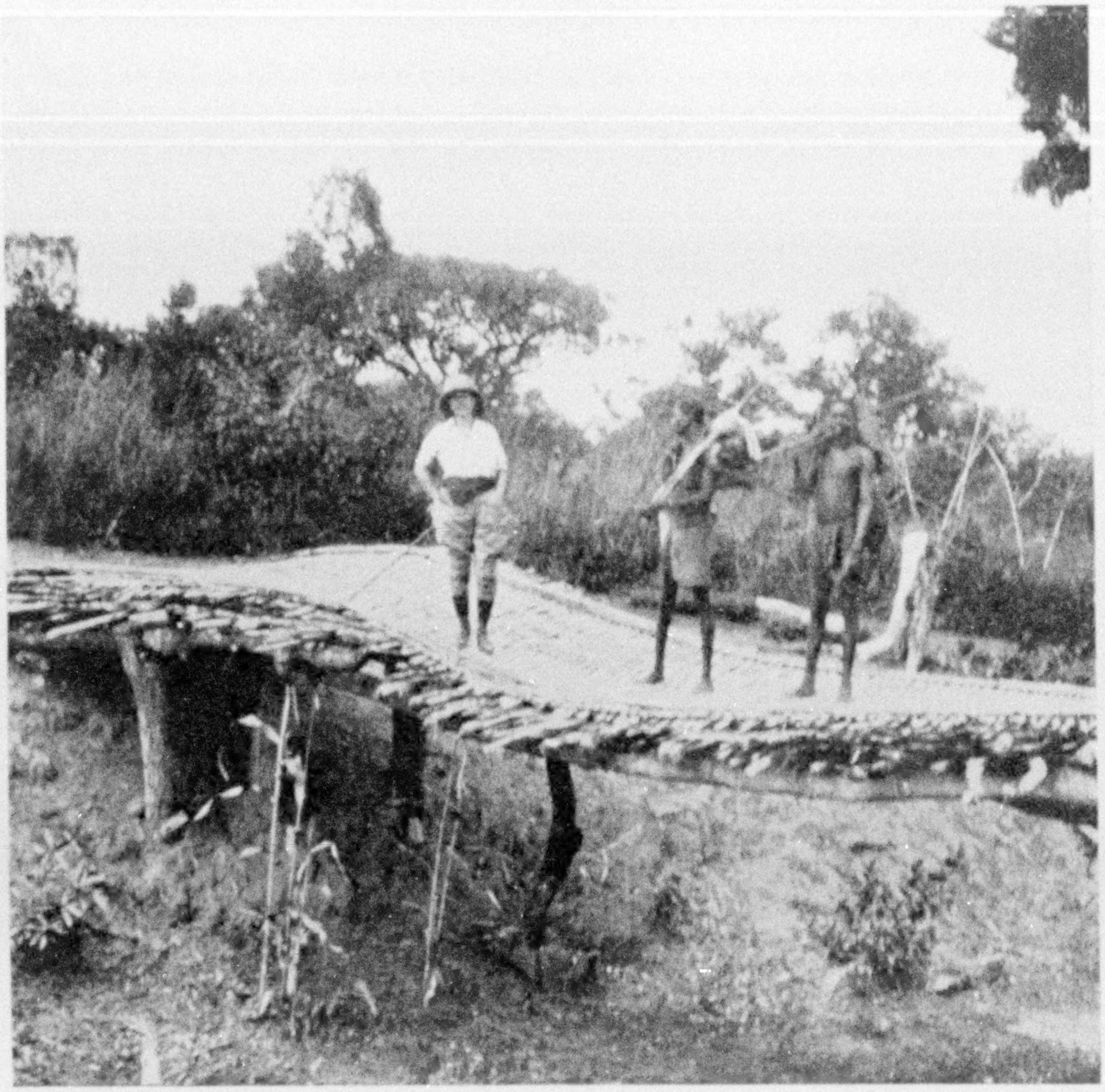
We arrived on Saturday; Sunday was a day of rest, and on Monday I paid my official call on the high commissioner and asked him to provide me with 24 carriers for the journey to Tabora. They reported to me promptly on the fourth day, early in the morning.

We lined them up and assigned the proper loads.

The Americanized English officer gave the blacks a lecture on what would happen to them if anything went wrong with that particular safari. Certainly he frightened them.

We bought each of the boys a yard of clean muslin to make them presentable. Then we selected four personal "maids" from the lot. Invariably we chose the younger boys as personal attendants, but it is no easy task to pick four sightly ones from a group of nearly naked savages.

As a last word, before we started, the top police officer, an Englishman, joined the group and added a few well-chosen threats as to what he would do to the



Photograph by Felix Shay

CROSSING A NATIVE WOVEN BRIDGE

Heavy woven matting has been laid on logs supported by piles. Sometimes the space between the piles is filled with sticks, grass, stones, and mud, leaving only occasional openings for water flow. Fish-baskets are placed in the intervals to make the bridge provide food as well as save natives from hungry crocodiles. Logs covered with matting bridge the gaps. Suspension bridges, using Nature's rope—twisted grapevinelike strands—are sometimes swung between convenient trees.

carrier who presumed to desert on the march, which occasionally they do.

At a station called Shinyanga, an outpost, we were to meet a British official who had been over that particular stretch of road and who could tell us something of the distances and the possible shelters.

Then we gave the "All Up" signal and we were off for Tabora.

THROUGH LION-INFESTED HIGH GRASS

We walked out of the settlement with a very sincere feeling of friendship in our hearts for the white men of Mwanza.

The distance from Mwanza to Tabora is variously estimated. Some say 250 miles, some say 300 miles. Using the estimate of the officials at Mwanza and later that of the official at Shinyanga, plus our own when we had finished, we decided that the distance was about 250 miles. This distance we negotiated in 15 walking days, with one day of rest, or 16 days in all.

We had been warned to keep out of Tanganyika. Old-timers told us that during the World War the contending German and Allied forces were not al-

ways able to clear away their dead, so the wild animals had become man-eaters.

Much of this formerly "German East" country is high-grass land, and there are more than enough lions in it. Incidentally, the high grass protects the lions and conceals them from the traveler. One never knows when he is in danger.

When we left Mwanza we had a safari of 23 black porters, one cook, the cook's wife, two lady friends of the cook's wife, two children that belonged to somebody, an old man with white whiskers, two extra porters with a dog coop, bound south, and one more porter whom nobody seemed to know, but who just came along to be friendly. Thus there were 33 in line whenever the free cigarettes were passed out.

Photograph by Felix Shay

THE LAST PHOTOGRAPH OF SOME HATS

A short time after this picture was taken the author's safari forded a river on the trail between Mwanza and Tabora. The boy on the left thought he saw a crocodile. Splash went the hatbox into the stream. Good-bye, hats!

For the first 60 miles beyond Mwanza the Germans had built a kind of road with some cracked stone in its composition. This walking was good for us, though not so good for the porters, who preferred the soft wayside paths and short cuts through the fields.

After that first 60 miles the road became a dirt path, sometimes 15 feet, sometimes 15 inches wide.

PORTERS TRAVEL 500 MILES FOR $2.50

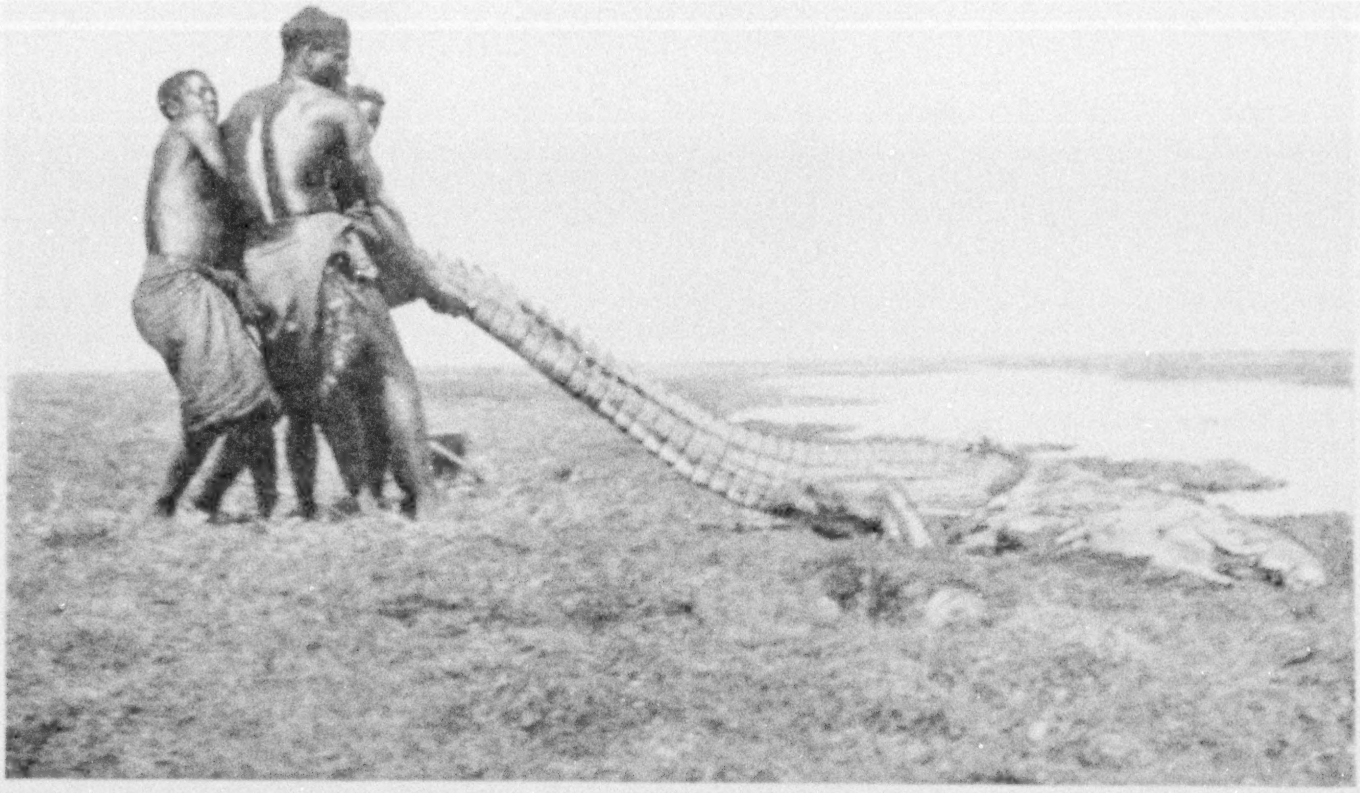
For long stretches the going was difficult. The sand and white dust were 6 to 12 inches deep. The African sun, which the white men say "addles one's brain," was with us daily.

The country itself was flat and rather uninteresting. The natives were courteous and childlike.

We were able to buy food in the villages at the following prices: chickens, 7 cents; eggs, 9 cents a dozen; sheep, 75 cents; goats, $1.00; firewood, 1¼ cents a load, all reckoned in shillings and pence.

These prices were supposed to obtain, but we found the average African entirely disinterested in civilized money. He would promise faithfully to bring in a goat; then, disappear and not return.

Several times I had to take a corps of my black boys and visit the local chief in



PULLING IN A CROCODILE

"On every bank we saw crocodiles sunning themselves—lazy, deliberate fellows, grotesque survivors of a prehistoric age. They were twice as large as we anticipated, and when we encountered them farther inland they stood up on really long legs and wiggled and wabbled away with considerable speed. When they were near the water they slid in with scarcely a splash" (see text, page 141).

person, select a goat and bring it back. Otherwise we had promises instead of goats.

A goat to eat is a great treat for these black carriers, and by such a reward we could show appreciation for extraordinary efforts and for cheerfulness.

Those who are interested in the American black may be interested in the names of these carriers in Africa: Jina, Ngumira, Walwa, Kwatogwa, Kiparu, Panduji, Masaga, Meyega, Masai, Malomo, Sahani, Masalu, Kabyure, Mashiba, Burugu, Musa, Mayala, Isobya, Makaranga, Kabati, Makomba, Muchafu, Pugarume, and Gombeshenji Kwidimya.

I paid these boys 7½ shillings each for the 250 miles from Mwanza to Tabora. In addition, they received an allowance of three shillings each for food for the entire journey. This was the legal wage. One must not pay more, or less, though, of course, a gratuity at the end of a journey is permissible.

These boys walked 16⅔ miles a day for 15 days, each with a load of 60 pounds on his head, and then returned over the same trail to Mwanza, a distance of some 500 miles in all, for 10½ shillings, or approximately $2.50 each.

When we reached Tabora we gave them what all called a generous tip, 3 shillings each. They were delighted.

CONVERSATION WITH PORTERS CONDUCTED WITH AN 80-WORD VOCABULARY

On this journey the cook was a Nyasaland boy, a mission boy, who spoke some English. Actually, he was a man of about 45. Most of my boys spoke some Swahili, though there were three or four different tribes represented among them.

On the march, because we were usually a couple of miles ahead or behind the safari, from my personal boy I learned to speak about 40 words of Swahili. Incidentally, I taught this 17-year-old native an equal number of words of Eng-

Photograph by K. Kittenberger

SKINNING A 19-FOOT GIRAFFE

Giraffes are rigidly protected by colonial governments (see text, page 206). Africa harbors many of the last remaining species of animals which once roamed widely in Europe and some even in North America. Notable among these remnant mammals are the giraffe and the hippopotamus. With India and the East, Africa shares the last species of elephants and rhinoceroses. The giraffe inhabits open country from the Sahara Desert south.

lish. By the time we reached Tabora we could converse volubly with this 80-word mixed vocabulary.

These savage boys were gentle, kindly, and invariably in excellent humor.

We had splendid good fortune. We not only had a singing safari, we had a song leader. This self-appointed leader would step out of line and run up and down past his mates and make a whirring sound with his lips and give an eccentric signal. Then they would break into song, usually a part-song. They were wonderful singers; it was positively inspiring.

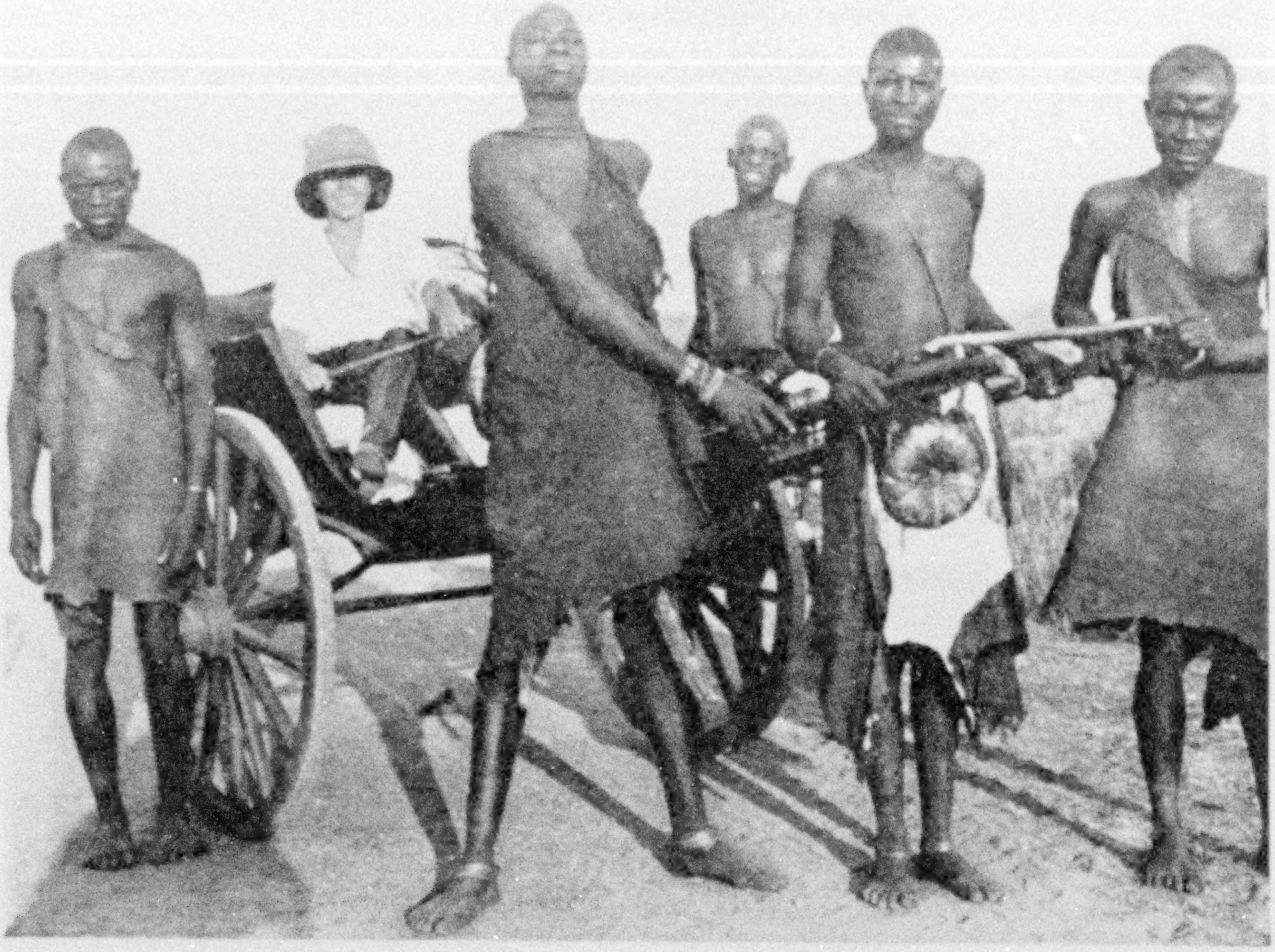
When we reached a village ahead of the boys we would sit outside the rest-house and watch these likable scalawags come in, strutting down the road, singing as though their lungs would burst—putting on all the style they could think of to impress the local natives. They came in like an army with banners.

We surely learned to like these black boys. To be afraid of them seemed absurd. We spoke to them and ordered them about as if they were seven-year-olds. They reacted dutifully to that treatment. They required a minimum of blame and a maximum of direction and instruction.

Like all the savages whom we had met in Africa, these boys had no manual dexterity. They made a sorry job of trying to put up camp beds, chairs, and a camp table. They had to be instructed every time. Yet they all were eager to help fumble. There was no order or system to their minds.

NO FRUIT AND VILE DRINKING WATER

When they knocked off a toenail on the march, they came to us to fix it. I would pour an antiseptic on it and supply bandages. When they fell into a hole and hurt themselves, they came to Porter or me for sympathy. One sympathizes with them as one would with a child. That was what was wanted. That was what satisfied them.



Photograph by Felix Shay

KIGOMA TO UJIJI BY RICKSHA

There are no horses, no donkeys, no autos in Kigoma. But an ancient ricksha with heavy cart wheels, requiring the strength of five stalwart blacks, bore Mrs. Shay over the hills to Ujiji (see text, page 235).

On this march we found no fruit until we were within eight miles of Tabora. Tabora has felt the Arab influence, so there was fruit in that center, but not on the trail.

The water on the march was vile. Often we had to dig into the beds of dry streams to find it. One night, at the end of a hard day, we had a good deal of difficulty in obtaining any, and when we did it was thick with mud, which we were not able to boil out or disguise the taste with lime juice.

That was one phase of this African trip which induced more hardship than the sun, or insects, or the fear of wild animals.

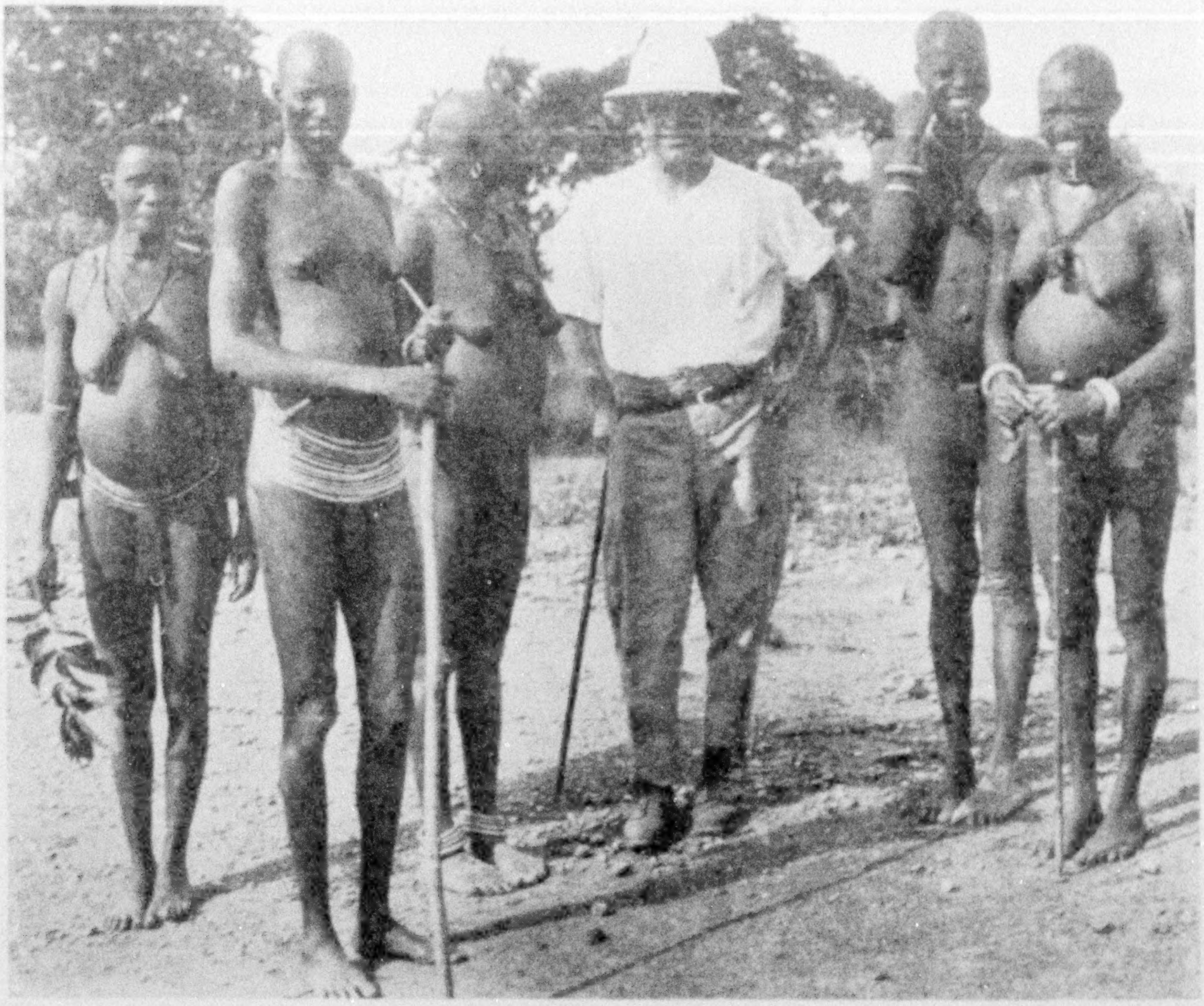
MRS. SHAY CAUSES EXCITEMENT WHEN NATIVE WOMEN DISCOVER HER

Usually at the end of a march the drinking supply was exhausted. Before one may have even a sip when he is parched, the water must be boiled. Then, of course, it is served hot. To drink scalding water when one is burning up with thirst is very unpleasant.

When we met blacks on the road they raised their hands and gave us the old Roman salute and said, "*Jambo, Bwana*" (Greetings, Master). We returned the salute and answered, "Jambo."

When we met women and they discovered that Porter, in her khaki riding trousers, shirt, and pith helmet, was a woman, they got vastly excited. They wanted her to know that they had discovered her; that she could not fool them. Usually she stopped to talk with them. They were exceedingly curious. The eternal feminine obtains in Central Africa as elsewhere.

They always wished to examine her clothes and such small ornaments as she chanced to be wearing, her watch and rings, and what not.



Photograph by Porter Shay

CENTRAL AFRICAN FEMININE BEAUTY UNADORNED

Native fashion in many districts decrees that the only apparel shall consist of breech-cloths, strings of beads, anklets and bracelets, and glass pendants perforating the lower lip.

She, in turn, I gathered, got an equivalent amount of pleasure from observing them. Usually they parted with a gift of matches.

These black women wore dozens of metal anklets, a mass of them. Several surely carried a weight of 12 to 15 pounds on each ankle. So heavy was this load that in numberless instances we observed that the foot was completely broken down.

One cannot imagine a more absurd custom among savages, who must walk every step they travel, than to break down the feet (see page 194).

Along this trail there were very few native huts. In German days (so the story goes) the Germans did not control their *askaris* (native police), who preyed on the native women wherever they found them. So native husbands took their wives far into the blue, off the trail, to escape the amorous attentions of these uniformed despots. Since the British have taken charge they have made their askaris conduct themselves as they should. The natives once again are coming back along the main trail to live; but as yet it is comparatively deserted.

Nevertheless, the ex-German district around Mwanza is one of the most productive districts in Africa. That fact seems to weaken this tale somewhat.

We saw much native cultivation, as much farming as in the Sudan, and the latter is a more fertile country.

Every hour of every day dozens of carriers passed us on the path with bags on their backs loaded with grain, taking it to Mwanza to market.

For a couple of days outside Mwanza we were still near enough to Lake Victoria to buy fresh fish from the natives, which was a much-appreciated change in the diet.

Many of the resthouses on the trail were beautiful to see. The savages build

Photograph by Porter Shay

THE AUTHOR BENEATH THE TREE WHERE STANLEY FOUND LIVINGSTONE: UJIJI

"Under the tree a scarred stone, tumbled on its side, bore the legend, 'Livingstone-Stanley, 1871.' The corner was broken off it, the edges chipped. It was foul with refuse. The stone rested, tip-tilted, thrown down carelessly, as an unwarranted obstruction in the middle of a dusty native street" (see text, page 235).

a stockade of saplings around a rest-house. These saplings take root and sprout foliage. The new green branches waved a welcome to us as we came down the road.

After we left the lake and the rocky promontories of Mwanza, we cut across a wide, open, hot plain. We walked for a steady six hours across this treeless country.

One day we passed some native royalty—a high-caste lady carried in an improvised sedan chair. She was colored, but she sought to give the impression that she was a Mohammedan. She tried to hide her face. But we laughed at her, and she dropped her veil and said, "*Jambo, Bwana.*"

All these blacks have a glorious sense of humor.

When we walked in the noon hour the heat waves flickered the landscape. The last couple of miles always required stamina.

A DIAMOND HUNTER PLAYS HOST

The fourth day out from Mwanza we came upon the claim of a Boer, or Afrikander, who had discovered diamonds. With the help of 100 black boys, he had made holes all over the landscape. Thus far he had found 32 scattered diamonds of sorts, but he could not find the pipe through which the precious stones had found their way to the surface. Naturally we were interested in diamonds, but we were more interested in the limitless supply of lemonade which he offered us, made from large, squashy lemons.

We sat in the shade of his hut and world-gossiped with him for an hour before we took to the trail again.

That afternoon we bought a bunch of 100 or more bananas from a black for an English sixpence. He seemed well pleased with the bargain, and so were we, because certainly no fruit grew in sight of us. These seemed to be wild bananas. They had not so much substance, were mushy, and had a core.

Whenever we passed through a native village all the blacks came out and lined the trail to cheer us on. Usually the chief wanted to shake hands with a white man. By so doing he seemed to gain prestige in his home village, and so we were glad to oblige.

Shaking hands is distinctly a white man's custom.

THROUGH THE LAND OF THE "DOODOOS"

These blacks were not permitted to carry firearms. They were armed with spears and bows and arrows. Occasionally we saw a particularly artistic bow, or a fine, straight spear, and we attempted to buy it. After securing one or two of these objects, we gathered the impression that our English-speaking boy was *forcing* the savages to sell, because all of these articles seemed to have a uniform price of a shilling, and the black went off handling the money as though it were red-hot. He didn't quite seem to understand what the transaction was about. Therefore we stopped buying.

A CONGO CANOE WITH A FOUR-BLADE PROPELLER

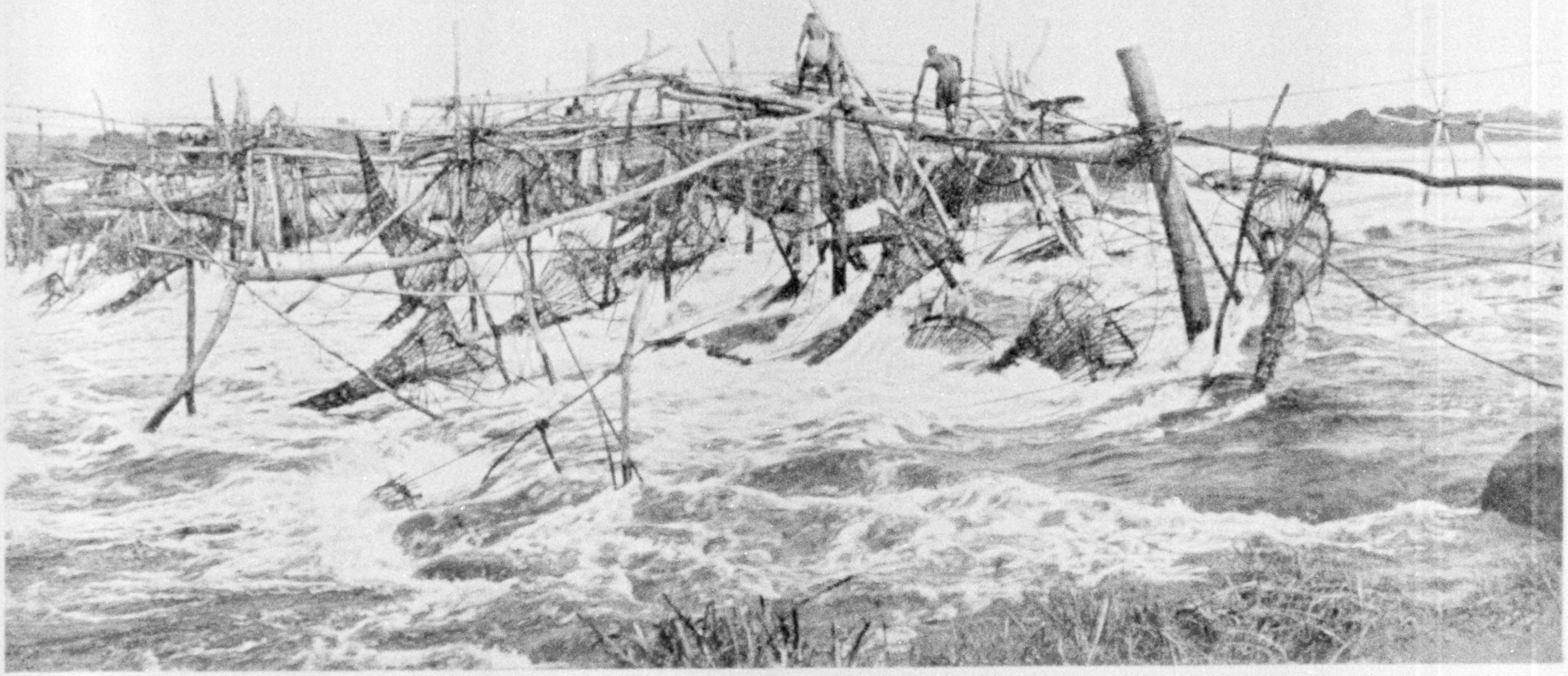
Big dugout canoes on the Upper Congo are often nearly 100 feet long. They comfortably carry a white traveler amidships under a leaf canopy, 40 pack-loads, 6 porters, and 20 paddlers. While the paddlers work they sing, usually led by the steersman. Resemblance to college crew rowing is complete if another canoe appears in the river, for a furious race occurs immediately. A victory is celebrated in song the rest of the day.

The day before we arrived at Shinyanga our cook-boy said we would have to start to march the next morning at 3 o'clock, because there were *doodoos*, and doodoos were fearful things. Musa's English was limited. He could not make clear to us what the doodoos were. Nevertheless, we followed his advice. I unpacked the revolver and strapped it to my belt, and at 3 a. m., in the dark, we started. The boys marched single file, while I marched outside their ranks as a kind of high corporal. They kept close together, which indicated they were fearful.

I turned over in my mind, What can "doodoos" be?

Along the dark path one of the boys fell into a hole and shrieked horribly! We certainly thought the doodoos had arrived. But up until the time we breakfasted on the trail at 6 o'clock we had seen no doodoos.

Shortly after breakfast my personal



Photograph by René A. M. Van Crombrugge

NATIVE FISHERIES AT STANLEY FALLS, NEAR STANLEYVILLE, BELGIAN CONGO

Stanley Falls consist of a series of cascades extending for about 120 miles. In the old days portages were made around the worst places. Now a railroad between Ponthierville and Stanleyville links the two great navigable stretches of the Congo River. Stanleyville is the farthest northern point now reached by continuous rail-and-river transport from Cape Town. (See the Map of Africa published as a supplement with THE GEOGRAPHIC for October, 1922.)

boy, who was a nonchalant character, slapped his chest vigorously, brought away the remains of a sleeping-sickness fly, showed it to me, and said, "Doodoo, Bwana."

For a period of hours we walked through this sleeping-sickness-fly belt. The flies swarmed around us. We were highly sensitive to their touch. The minute they lighted we shooed them off. But one of the insects bit me in the *palm* of my hand before I knew he was there.

Fortunately for me, it was not an infected fly.

The blacks, with their bare bodies, had small protection against them. We saw flies rest for limitless periods on the backs of our boys, even though the men behind attempted to slap them off. Eternal vigilance is not a savage virtue.

The black's skin is thickened by the direct rays of the sun and is not sensitive. The boys could not feel the flies until they were bitten.

One night when we reached camp, before we were decently seated, we heard the chant of many voices. Presently the local chief arrived with 400 or 500 of his men, singing. They made several giant half-circles and started an inferno of noise that would have waked the dead. They sang and danced and jumped into the air. They were giving us a sort of royal reception, but our outraged nerves could stand it for only 20 minutes. Then we presented the chief with four shillings and a package of cigarettes, told him that we were delighted with his men, and that we wanted to take a bath.

He removed them with a gesture.

This reception was accorded us on several occasions.

A rather startling proceeding was to have a whole village of blacks drop down in the dust on their knees and clap their hands vigorously in greeting. This was not applause; it was greeting.

NATIVE BOYS CATCH FISH WITH THEIR HANDS

When we came to a certain stream of flowing water, some of our boys waded in to their knees and with their bare hands proceeded to catch about 25 fish each. A boy would stand motionless over the water until a fish would swim by; then he would snatch it out of its element with his hands.

Up in the Sudan, and here in Tanganyika as well, whenever we reached water the boys took off their loin cloths and went in for a swim. Only one out of a dozen seemed able to swim. The rest simply paddled and bathed (see p. 209).

Before we reached Shinyanga we came on a group of approximately 600 native men clothed in skins, mending a hole that the rains had washed in the road, which at this point was a kind of embankment across soft, lush ground. The hole was some 40 feet deep and perhaps as wide.

These savages had made a regular carnival of fixing it. Lots of noise, lots of dancing.

While we passed through the double lines of these 600 curious savages, every man said, "Jambo, Bwana." They were a little uncertain about Porter; they did not know whether or not she was a "Bwana."

A GREAT FUTURE FOR THE LAND WHEN THE TSETSE FLY IS CONQUERED

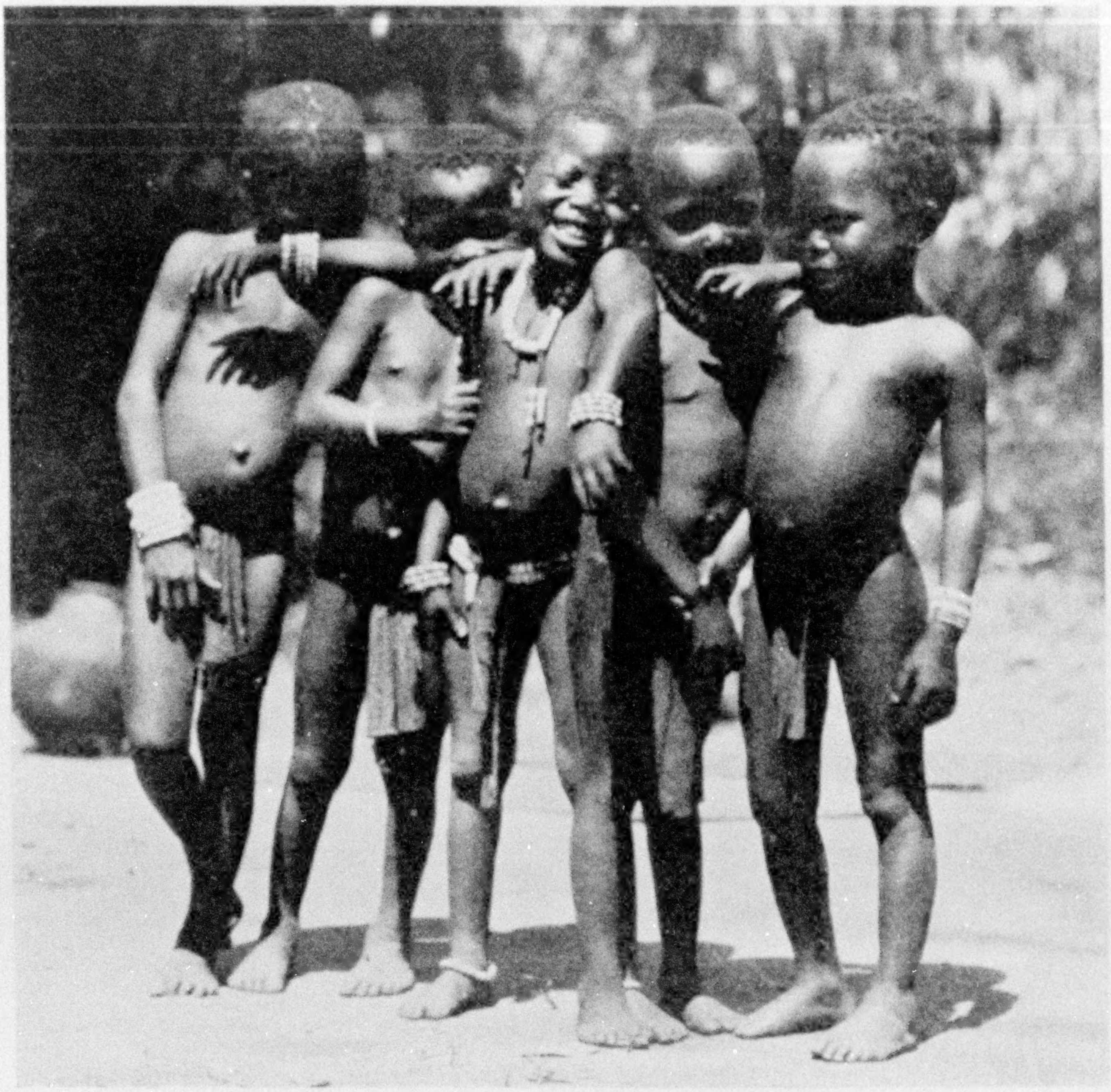
The British officers at Mwanza told us that we must avoid sleeping inside the resthouses between there and Tabora, because of ticks. Ticks burrow into one's foot and lay eggs. The flesh festers, and since the mass must then be cut out, there is no more walking for months.

We tried Bolini's tent for one night, but found it so insufferably hot that thereafter we pitched our beds in the open. For the balance of the journey to Tabora we were cool and comfortable (and dangerously exposed to wild animals) at night.

In Central Africa the days are insufferably hot; the nights cool and often windy. Occasionally the wind blew the mosquito nets off our beds. We usually turned in at 8 o'clock and slept like the dead until 4 or 5 the next morning.

The mornings were cold. When we stopped to make breakfast on the trail, the carriers had to build a huge camp fire to keep themselves warm. They sat around it and shivered.

This was a lion country. We saw skins of them everywhere among the natives. Often we heard hyenas and jackals and lions near by at night.



"I'VE GOT THE CONGO GIGGLES"

The young soloist is supported by a solemn quartet of Central African playmates.

The country we were passing through was impressively fertile; the soil rich and black. One day the bush that protects the sleeping-sickness fly will be burned off Africa. Railways will be driven through, plantations will be opened up, and a new source of tremendous wealth will be available to the world.

Authorities say the lack of water is a serious drawback, yet for three or four months of the year this country is flooded with water. Surely this can be conserved for the dry season.

At different times on the march several of our safari developed fever, probably due to contaminated water. We dosed them liberally with quinine. They all recovered promptly except one woman, who whined and was miserable.

These blacks lived exclusively on peanuts and durra flour, fortified with a kind of starchy nut and a small sour apple, both found along the trail.

We passed hundreds of huge baobab trees, 60 feet or more in circumference, with gigantic trunks and stunted, twisted limbs. These trees were weird and ghostlike (see pages 211 and 231).

PYGMIES PASS AND SALUTE

Because of the swampy nature of the ground in places and the high-water mark left by streams in the freshet season, we concluded that this section must be impassable in the rains. The signs all told the story. Luckily the rains had passed over us farther up country.

One day we fell in with a group of

HAIRDRESSING IN A CONGO BEAUTY PARLOR

Pygmies. There were about 40 of them, all men, about 4 feet tall. They were well set up, with well-knit bodies and showy muscles, and carried themselves erect and with dignity. Most of them had beards with two sharp forks. I understood that they were very timid individuals and expected to see them dart into the underbrush. Instead, they came along in good order and saluted us, and we saluted them. But we did not have the audacity to try to take their pictures. Besides, they came on us unexpectedly. We were walking through them before we realized they were not ordinary blacks.

We saw many ant hills in Central Africa which were 10 feet or more high. Huge armies of driver ants crossed the trail and made well-defined boulevards. Through these furrows they hurried in an endless stream, bound somewhere on important business. We stopped and watched them come and go. They observed traffic regulations. There were no jaywalkers.

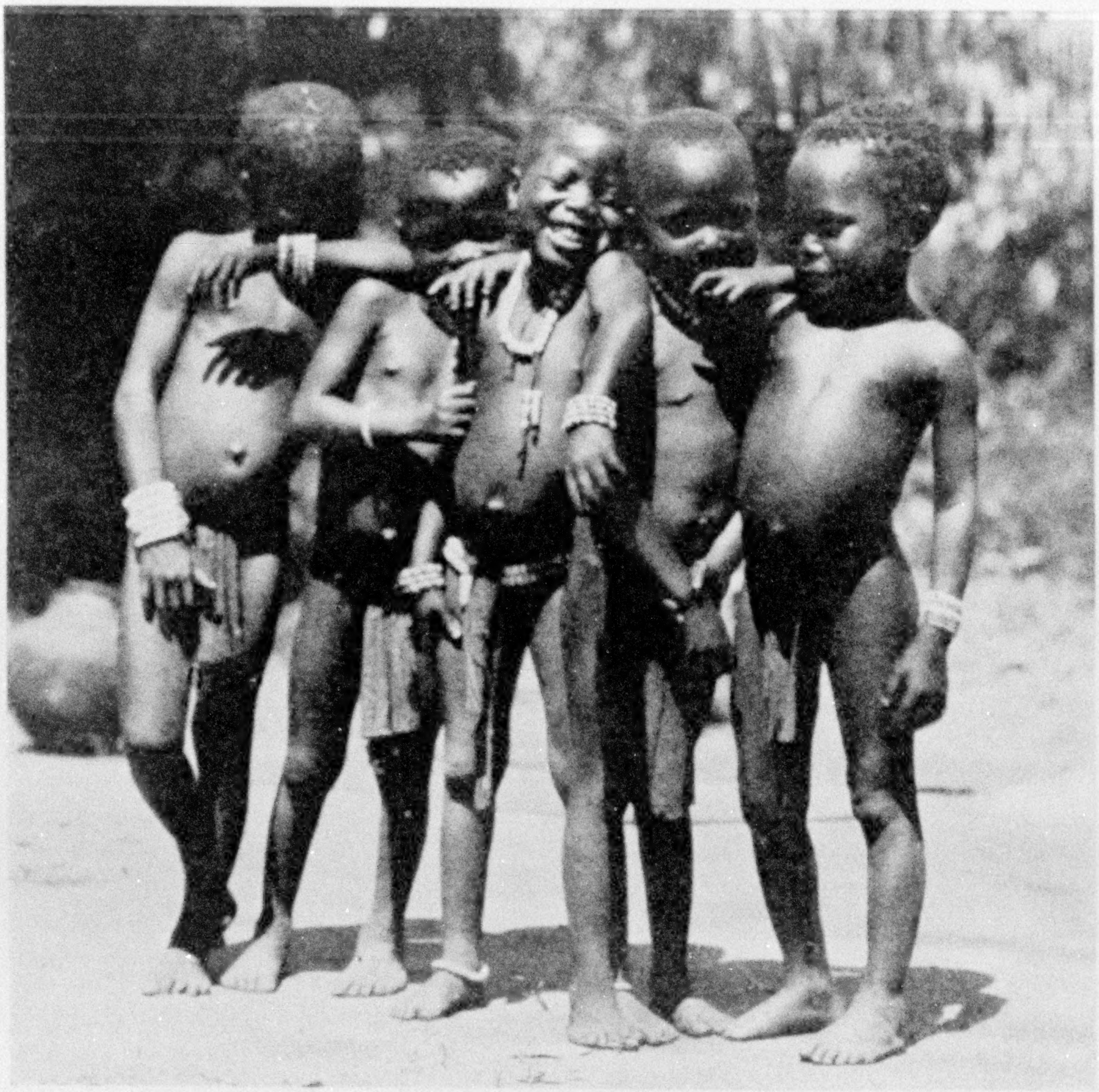
Along the roadside were gorgeous purple hollyhocks, the blooms of which were larger and the petals more numerous than those we grow in America. There were morning-glories in pinkish-white profusion.

Our boys carried numberless noise-making instruments, including a dozen different varieties of horns and drums. When the horns were blowing and the tom-toms thrumming and thirty voices were lifted up to the sky, there was a tremendous volume of sound.

These wild voices have a remarkable range and a wonderful quality.

The native chiefs usually walked up the path a short distance to greet our incoming train. Invariably they wore some white man's cast-off garment, oftentimes only a coat. This was for distinction and to impress us. We did our best to be impressed.

Before we had accomplished half the distance the uninvited black women became very tired, which seemed a curious phenomenon to us. They were a drag and a responsibility. We were not at all



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PLAYING A GAME POPULAR FROM THE CAPE TO CAIRO

Soombi and Okwe are two of the many names for a game almost universal in Africa. The playing board has from 10 to 20 holes on a side. Counters are seeds and the victor may eat his winnings. The game has many points in common with checkers and chess and is a favorite with elderly men. Quarrels often occur between players. Then the tribal chief may prohibit the game—for a time.

expert walkers, yet we found it easy to tire these blacks. They had no staying qualities.

THE AUTHOR GETS A REPUTATION AS WITCH DOCTOR

The last third of the journey it was rather a task to hold the boys to the daily schedule of 16 miles plus, so we resorted to all kinds of tricks and subterfuges.

From the fakirs in India we learned much so-called "magic." When we stopped for a rest along the trail, to take their minds off themselves, I would show my black boys some "magic tricks" which absolutely astounded them. After these tricks they addressed me by the Swahili name for witch doctor, Bwana Mchawi! (see illustration, page 178).

What was more important, they spread the news through the villages as we passed that I was a witch doctor. Thereafter each night, when we finished dinner, practically a whole village would be in attendance, waiting for me to perform "magic."

To get rid of the audience, I usually had to do one or two simple "magic" tricks, marvelous to these savage eyes. Invariably after one of these performances the chief would send us some kind of a gift.

One day when we marched into camp we found a very rough-and-ready safari there ahead of us. It did not look like a white man's safari, and yet it did; the equipment was much the worse for wear.

A GOLD PROSPECTOR FOR HALF A CENTURY

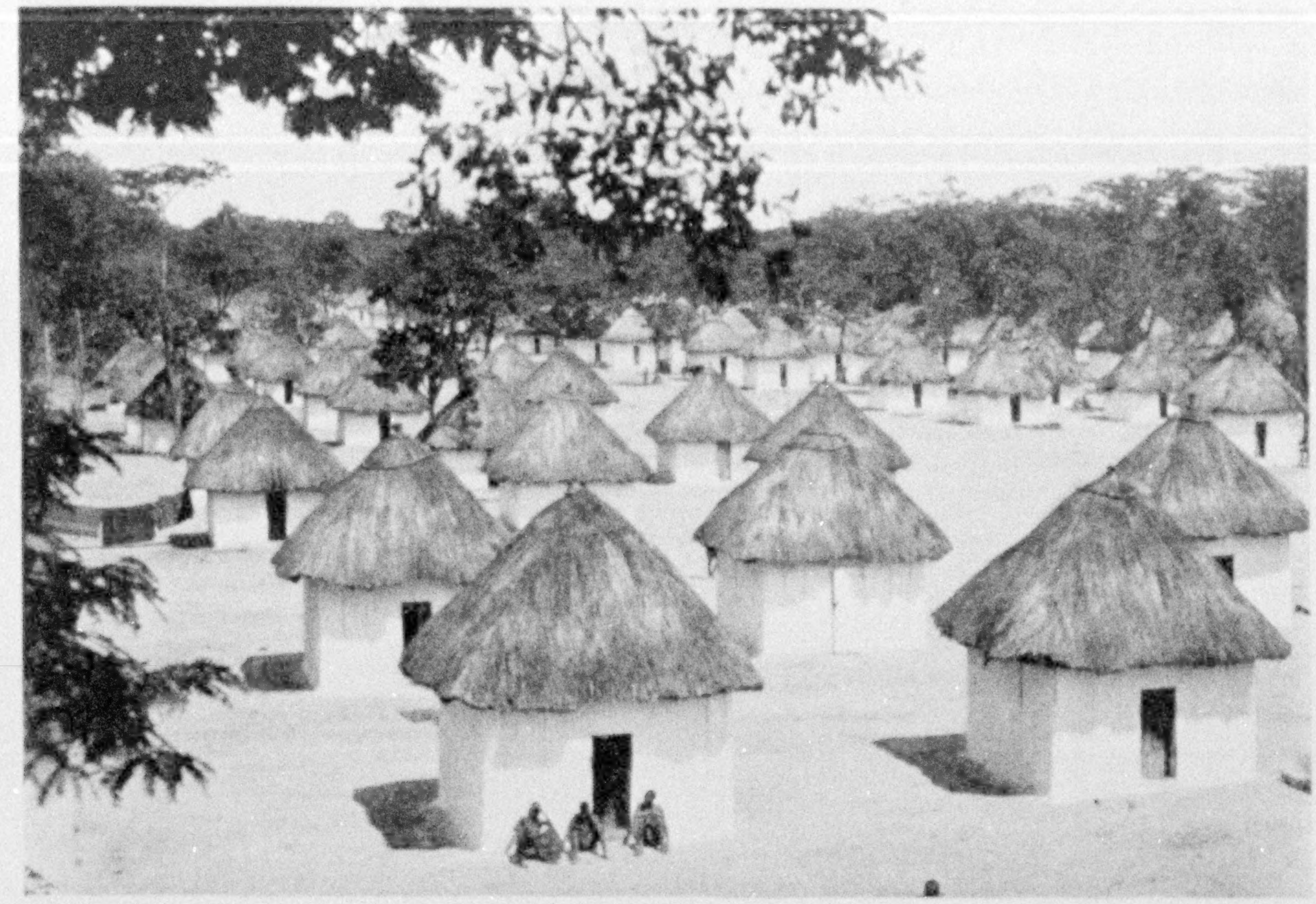
Presently there arrived an individual, carried in a rude chair on the shoulders of four blacks. He was an 80-year-old Swede, a gold prospector.

A gold miner, no; a gold prospector, yes!

He addressed us as fellow-miners and old inhabitants and inquired about Jones and Smith and Jenkins and Clark at Mwanza.

Then he said, "Have you heard about the rush?"

We thought he said "Russ." We



THE NATIVE HUTS OF MINERS IN ELIZABETHVILLE, BELGIAN CONGO

During the World War Elizabethville enjoyed great prosperity on account of the copper mines in the vicinity, which employed thousands of blacks and enough white men to keep them in order. These huts have corrugated iron walls and thatched roofs.

thought that England had recognized Russia. But he did not mean Russ. He meant a *gold rush*. It seems he was participating in a gold rush.

For more than a score of years he had roamed in Australia, for 16 years in Bolivia, and for 11 in Africa, hunting for gold. This time he was positive he would find it.

He had mild blue eyes and he was a gentleman.

We led him to believe we would participate in the rush a little later, but he was sure we would miss the principal doings if we did not get there quickly. Where it was we did not discover.

He had luncheon with us and then moved north, while we moved south.

One must never depend on the native blacks, nor on the headmen along the road for directions. One must have a kind of schedule and hold to it. One's own boys will give misinformation purposely, and so confuse the traveler, in order to cause a rest for a day at an attractive village.

We did our best to establish an inflexible schedule.

Sometimes it was rather difficult to get the boys to move off promptly in the morning, though there were usually three or four willing ones to help make the start.

OVER THE ROAD OF A THOUSAND LIONS

Toward the end of the journey my fever gave me much trouble. Every night I had it when the sun went down.

The boys became tired and the women more than tired. They showed blisters and complained of sore feet.

At a stop called Tindi, early one morning, after we had walked about an hour, they tried to prevail upon me that this was the destination, while I knew instinctively it was not. Kiguhumu was that day's objective. Then things happened. Food couldn't be cooked. No wood or water came from the village. Boys got lost. There were a thousand and one excuses.

I hailed Musa, the cook, up in front of

my chair and said, "No matter how long we delay here, we walk to Kiguhumu to-day."

Walk we did—across an alkaline plain, or what tasted like one—a hot, low country. This was the worst we had experienced since we left the great desert. Not a breeze blew. We seemed to walk on dead air. Scrub bushes and a hot, sandy road. How those blacks suffered and wilted. Every hour we had to rest for half an hour. We arrived finally, at 5 p. m., though we had covered only 14 miles that day.

I shall always think of that trail through the scrub as the Road of a Thousand Lions. That soft sand road had as many lion tracks in it as native tracks. The boys closed in fearfully, walked on one another's heels, and called to me perpetually "Simba (Lion), Bwana"! I got out my inadequate revolver. But no lions attacked. Mice and weasellike animals helped maintain the tension, darting across the path. But no lions. Even so, one had the uncomfortable feeling that we were being watched from the scrubby bushes and high grass, through which we pushed, by animals that had us at their mercy.

"OLYMPIC GAMES" HELP TO REVIVE SAVAGE MORALE

The next day we marched 12 miles. When we arrived at the resthouse, the boys were so tired they dropped their loads and fell asleep, each man by his load, without even seeking shade. When an African sleeps before he eats he is tired indeed.

I knew that something must be done, but I wondered what. Then inspiration came to me. Paradoxically, I decided to hold Olympic games. These blacks have no other diversion than singing and dancing. I had a bag of new English copper pennies in my kit. When the cool of the evening came and the boys arose from their coma, we introduced them to the broad jump, the three-legged race, the 100-yard dash, and sundry other contests. We offered bright copper pennies as first prizes.

The boys participated with newborn enthusiasm. We had two hours of roaring, glorious Olympian sport, during which the participants forgot they were tired. I distributed as many as 25 copper cents as medals, some of them to savage gentlemen with long black beards, the grandfathers of families, for outdoing their fellows in sprightly sport.

One day I learned something of the ability of these boys as trackers. We had walked down the trail for almost two hours and traveled, say, six miles from the resthouse, when I discovered that I had lost my only piece of jewelry, an Eastern ring of rather unique design. I called three of the most intelligent boys together and explained the situation to them. I offered them a shilling each to return over the trail, and three shillings extra to the man who found the ring.

That was at 7 o'clock in the morning. At 2 in the afternoon they came into the clearing of the next resthouse and handed me the ring.

Mind, these boys had not stolen this ring in the first place; they were not thieves. I had wrapped the ring in a handkerchief that morning when we started on the march, behind the safari. Somewhere over a stretch of six miles, I had taken out the handkerchief and accidentally dropped the ring.

In that six miles we crossed all kinds of uneven, ragged country. Many times we had been off the proper trail.

Perhaps finding the ring was luck, but it was very impressive to me.

When we bought these boys a goat they dismembered it, shared it, and carried it with them for days, exposed to the sun, till it became a glassy blue and covered with flies. They carried chickens tied to their belts, head down, until peremptorily we ordered the fowls killed.

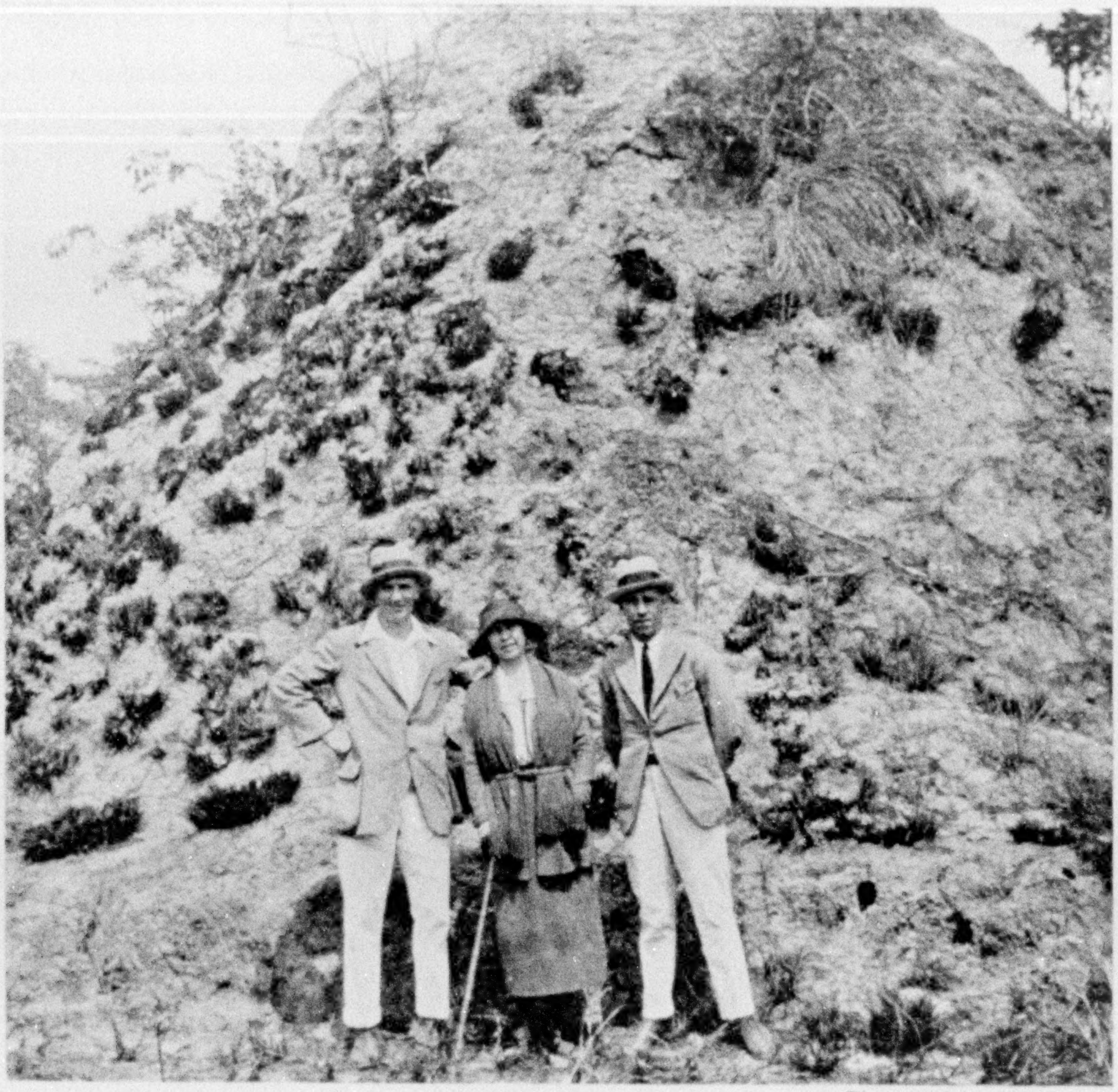
Every night these blacks crooned themselves (and us) to sleep.

The nights were spooky dark, cloudy, with an eerie moon. The stars usually were clouded over or very, very faint, not at all like Egyptian skies.

The drums, far and near, talked all night.

MRS. SHAY TRIES TO MAKE TOTO WASH

The boys had no soap and no understanding of its use. They bathed in water only when we reached a running stream, and such were few. Our camp smelled like a circus.



Photograph by Felix Shay

AN ANT HILL ON THE GOLF COURSE AT ELIZABETHVILLE: BELGIAN CONGO

The Elizabethville Golf Club consists of a small one-room shack and lots of scenery. On the course are some 600 ant hills, which make difficult hazards. Some of these giant mounds are used as garages (see text, page 246).

Porter undertook to clean up our personal boys, particularly her "Toto." They thought it was great fun. She would give a boy water and soap and tell him to wash his ears. He washed his ears and nothing else.

All these six-foot bewhiskered blacks called her "Mamma." For a five-foot woman, with young ideas, to be called "Mamma" by these huge blacks seemed to her rather an outrage. She ordered them about, gave them tasks to perform, dosed them with quinine, and treated these ferocious children with the utmost unconcern.

They also called her "Bwana Dogo," which means in the Swahili language "a little, a very little, a morsel, a crumb."

When one of the gay wenches was ill with fever she offered small resistance. She was a wreck. She had lost her social instinct. She had taken the fancy plugs out of her ears. She whined all day.

We recommend to travelers in Africa that they do not include black women in their safaris. They are the cause of much trouble and annoyance.

One night we gave the boys permission for a big dance. We brought out our chairs to watch them. They appreciated an audience. They built an extra-large fire and all of them, including the women,

A CORN-ON-THE-COB FEAST IN RHODESIA

In Rhodesia there is practically no wild fruit; so, when a missionary wished to describe Christian and Faithful, in "Pilgrim's Progress," living on the fruit of the land, he depicted them sitting on their heels munching large ears of corn, "mealies," as they are called in South Africa. Corn is a staple food of millions of African natives and in some places three crops grow each year.

got into the semicircle. A leader placed himself in front and chanted; they all replied. A short verse and chorus. They jumped up and down and sang, shouted, and danced. It was neither artistic nor amusing.

When they became quite excited I called a halt. To gain time, I lined them up and passed out cigarettes. Several dozen or more village natives had joined the dance, and so they were the recipients of cigarettes, too. One black standing off by himself received a cigarette and immediately thought it necessary to repay me, so he joined the dance.

When he came into the circle the erstwhile leader gave way and the new black took charge; evidently he was of some importance. At once he started to do a jackknife dance, throwing both his feet up against his face. He repeated this mild exercise about 100 times, until he was streaming with perspiration.

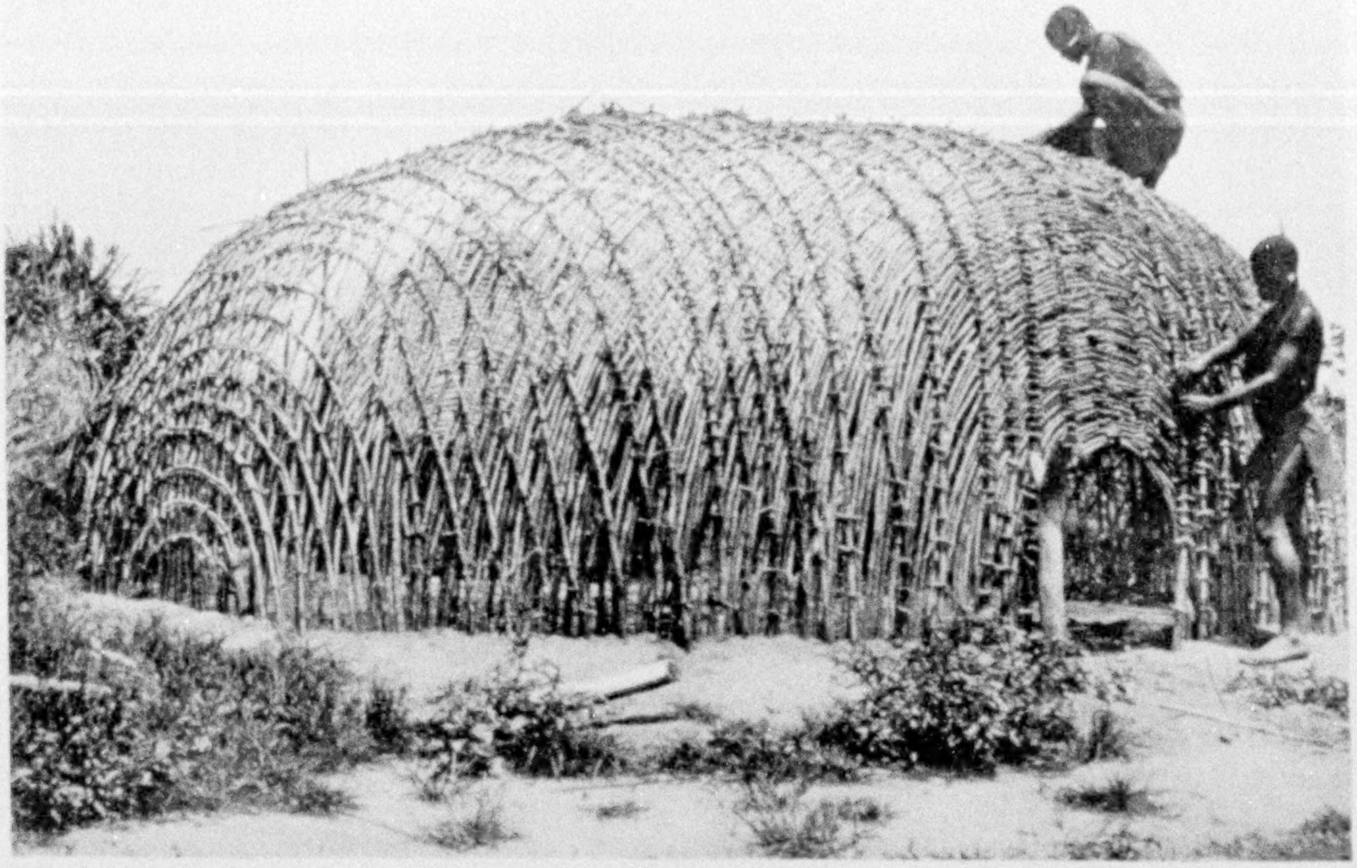
Then in a fine frenzy he went over to the great fire and took out blazing sticks two or three inches in diameter and proceeded to eat the fire off them and blow smoke with his mouth full of hot coals. How the gentleman accomplished this delicate task we cannot explain. We only know we saw him do it.

Often the grass along the trail was 12 feet high and so thick that one could not see three feet into it.

We found that we were rarely very hungry after these marches, but we were parched with thirst. Tinned Hawaiian pineapple was the most satisfying delicacy imaginable under these circumstances. Unfortunately, we had only half a dozen tins with us on this march.

Early one morning a huge snake dropped out of a tree in front of us on the path and glided into the bush, leaving a trail six inches wide. We were ahead with our personal boys. They would not go in with us; they were afraid; so we waited for the safari to come along to get the revolver. Then three adventuresome spirits joined us and we went in after the snake. While we looked on the ground, we noticed the natives looked up into the trees. We did not find it.

Once we bought two beautiful tom-



Photograph from Albert Smith

HOUSE COMPLETE IN ZULULAND, SEVEN DOLLARS

Finishing touches are being put on the framework of a Zulu house in Natal. After the men have finished tying in saplings, women will lay on the grass thatch. When the cooking fire in the center has sooted up the roof sufficiently, the thatch will not leak.

toms from a savage. They stood about two feet high. The workmanship was crude and bizarre. He asked two shillings for both of them. My boys protested loudly. One shilling for the drums, they indicated, would be enough. When I gave him three shillings, my boys were disgusted with me.

A SIKH IN THE RÔLE OF GOOD SAMARITAN

The blacks in the villages we passed through slept on the ground, inside stockades at night, under grass shelters, like animals. Along this trail they knew nothing about the gentle art of personal cleanliness, because primarily there was little water. Their fare was so simple one could not understand how they lived on it. They did not eat meals at regular intervals; they ate when they were hungry. Whenever food was plentiful they ate until they were gorged. We saw dozens of spindle-legged six-year-old infants, the pets of their families, with their stomachs so distended that they were horrible to the eye.

The day before we arrived at Tabora was the hardest of the trip. We started late because the headman at Izikizia and Musa, the cook, had agreed that we had only three hours to walk. We started at 7 a. m. We walked easily. When noontime came, with no resthouse in sight, we waited for the safari to come up. I said, "Well, Musa, where is the resthouse?"

Musa replied sullenly, "I think that sultan, he big liar."

The sun was hot, terrifically hot, especially in the middle of the day. The principal effect it had on us was to make us quarrelsome. That day it punished us severely.

We reached the village of Kazema about 1 o'clock, in the glare of the noonday sun.

We were so completely spent that we rested in the center of the village for an hour, in the shade, before we attempted to go to the resthouse, 100 yards away.

Here we were the recipients of a thoughtful act of courtesy on the part of

a Sikh, a solitary East Indian, who owned a very, very poor store there. When he saw that we were whites, and that we were exhausted, though he could not speak a word of English, he voluntarily brought us tea and sweet cakes—and some ripe papaws, which were very refreshing. He refused absolutely to take money for his gift.

The next morning I presented him with my camp chairs and camp table. He was particularly delighted with the gift because it came from a white man in the presence of the village natives.

That last morning we had an easy nine-mile walk into Tabora. We started on tea and nothing else, as the cook's box was empty. We passed through avenues of banana palms. Our boys solicited the gaping natives for bananas, but they were so busy being curious about us they had no time to look. They continually answered, "Apana" (No). Inasmuch as bananas seemed the most desirable things in the whole world just then, I am afraid that we were not equally interested in the natives.

Instead, we discussed what we would drink, and all we would drink, when we arrived at Tabora. Porter promised herself a gallon of lemonade made with clean club soda, while I said I would have a couple of the largest bottles of German beer procurable. The hotel in Tabora (in British territory) still answered to the name of "Kaiserhof," so I figured I would not be disappointed. Nor was I.

IN TABORA, WHERE THE ARABS RESTED THEIR SLAVES

After a bath and a change into civilized clothing in Tabora I lined up my boys and paid them off. I shall always remember them gratefully. They were a cheerful, likable crowd. One boy in particular we wanted to take with us. We disliked the idea of sending him back into the jungle—a 17-year-old boy who promised better things than being a savage.

That not being possible, we contributed 16 shillings to enable him to buy a particular native belle for a wife, to console his old age.

The word Tabora means "The Resting Place." There the Arabs, en route to the seaport of Zanzibar, rested their slaves captured in the Congo.

There was an influenza epidemic raging when we arrived at Tabora, and we feared we might be refused admission to the Congo. All of these African provinces, especially those under different governments, are suspicious; they tell incredulous tales about each other, and all epidemics are supposed to come from the *neighboring* states. Eventually, a certain friendly British official, together with a letter of introduction which we carried from Lord Leverhulme, fixed it, so there was no delay at the Congo border.

In Tabora Henry M. Stanley fought one of his battles. There is many a black here who threw a spear at that explorer.

A SULTAN ENTERTAINS WITH A DANCE BY 50 WOMEN

The present sultan, the son of the old chief who fought Stanley, entertained us at tea, and for our edification more than 50 of his young women danced. Each one had a bright new red tablecloth to wrap around herself in honor of the occasion. They sang in shrill voices and shuffled in an endless circle, until our eyes grew weary of the patterns on the red cloths. The entertainment was given inside the sultan's walled garden, outside Tabora.

There were a number of Europeans in the town and quite a settlement of Hindus, traders, and shopkeepers, who constitute the most important problem of Central Africa to-day.

Then there were the Arabs, who have been in and around Tabora for hundreds of years. The Arabs had well-marked slave trails through this country for a thousand years before the white European adventurers arrived.

This fact somewhat changed our conception of the hardships endured, the hazards surmounted, by the earlier white adventurers and explorers. Africa presumably has been a maze of native paths for centuries. To make progress, one need only follow the paths and endure.

After our observations in Kenya, and again in Tabora and vicinity, we were impressed with the fact that under present-day conditions this Central African country offers small opportunity to the individual settler. He is quickly starved out. Only governmental enterprise or undertakings backed by corporations with

A BAOBAB TREE 86½ FEET IN CIRCUMFERENCE; VICTORIA FALLS

Though not exceptionally tall, the gouty trunk of the baobab sometimes attains a diameter of as much as 30 feet. Its blossoms have waxy, white petals hanging straight down by a threadlike stalk. Its "calabash," or gourd fruit, resembling a coconut in shape and containing a thirst-quenching, watery pith, is sometimes called monkey bread. Baobabs grow throughout Central Africa.

limitless capital seem to have a chance to succeed.

In Kenya many of the individual settlers have deserted their plantations and come in to Nairobi, hoping to secure any kind of paying job. In Tanganyika Territory the individual German settlers have all been deported and new settlers have not yet arrived.

To conquer this wilderness requires a community of action.

In Tabora we saw definite traces of the Arab influence. There were trees of exotic fruits and many of the luxuries dear to the Arab world.

The Arab, in a comfortable mood, was very much a gentleman. He lived as such. The Arab, hunting slaves, was cruel and heartless. He invaded the jungles, captured the blacks where he found them, separated families, tied the unfortunate creatures together in gangs, and hustled

Photograph from Gardiner F. Williams

VICTORIA FALLS, ON THE CAPE-TO-CAIRO RAILWAY (SEE ALSO PAGES 172 AND 173)

It was the wish of Cecil John Rhodes, pioneer planner, that the traveler from the tip to the toe in Africa should come away with the memory of the mist wet on his lips from Africa's greatest waterfall. A spidery bridge balanced above the gorge of Victoria Falls realizes that dream. The great cataract of the Zambezi River is 1,642 miles from Cape Town by rail. Bukama, the present South-African-system railhead farthest north from Cape Town, is 928 miles beyond the falls. Although this stretch almost equals the United States' shortest transcontinental rail route, yet it is less than half the projected Cape-to-Cairo route. Victoria Falls, discovered by David Livingstone in 1855, are more than a mile wide and vary in height from 256 to 343 feet (see text, page 251).

them off to the coast under the whip. They never returned.

These flagrant slave raids brought Livingstone to Ujiji, a short distance to the west, and Stanley ultimately to find Livingstone.

A HOTEL PROPRIETOR IN THE RÔLE OF PHILOSOPHER AND PHILANTHROPIST

Disinterested persons told us the gentleman who operated the Kaiserhof Hotel lost double his overhead expenses each month. He was a Greek, a philanthropist and a philosopher as well. All in Tabora spoke well of him. He deserved it. We shall always remember him as a kindly, generous-spirited man, who sought to make his hotel something more than a halting place in a country of discomforts.

One of the British majors in Tabora invited us to his home to dine with certain of his associates. There we observed a splendid example of how the Britisher upholds civilization in the jungle. Once seated at his dining table, with its linen and silver and fine glassware, well-cooked food, and excellent service, one might have been dining in London.

We were amused by a yarn one of the officers told us at dinner: "The way to catch a lion is to catch him by the tail, and, catlike, he will try to pull away. Then, when he is pulling and straining, have some one come up and spear him.

"That is the way the natives do it. Try it on your house cat. If the theory is correct, then try it on a lion."

We promised to try it on the very next lion we met.

A VISIT TO THE WHITE FATHERS

Sunday afternoon we called on the White Fathers. The bishop in charge received and entertained us. These White Fathers come out to Africa as volunteers for life. Other white men go home on a vacation once in a year, or once in two years, but the White Fathers stay till they die. Men of all faiths in Africa speak well of them and their work.

The bishop had served 28 years with only one trip home. Once, 20 years before, after recurring attacks of the deadly black-water fever, they carried him back to Europe on a stretcher.

This dreaded black-water fever usually follows a succession of attacks of the ordinary malarial fever. Those who contract it rarely survive.

The head house of the White Fathers in Tabora was a bare and barren place inside, but outside a bower of growing things. Here they most emphatically disproved the theory that this or that cannot be grown successfully in equatorial Africa. The bishop pointed out 17 kinds of roses in a country which the armchair agriculturists say "will grow nothing." All the flowers, and dates, mangoes, papaws, oranges, pineapples, coconuts, lemons, and goodness knows what not, were there in profusion.

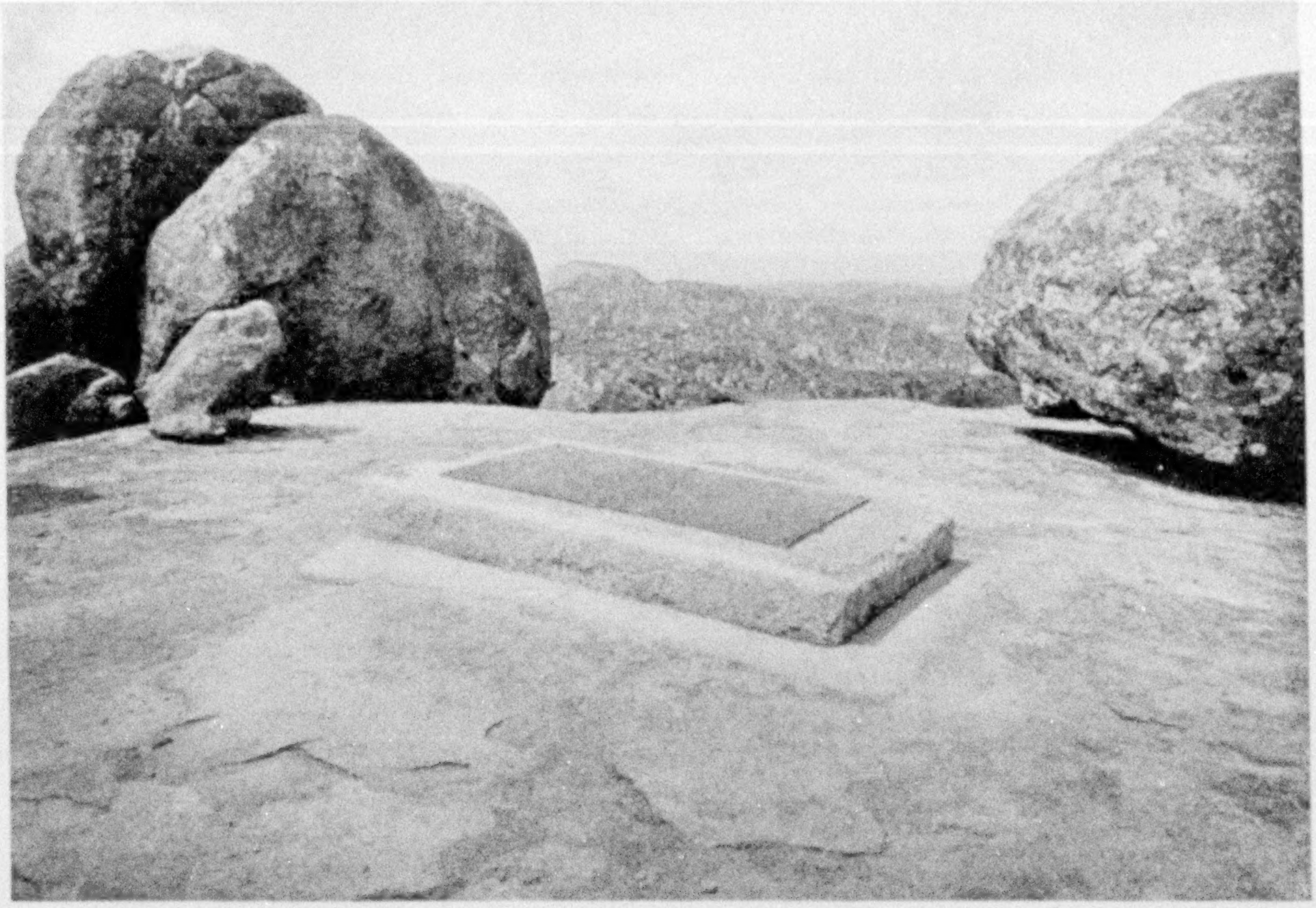
Behind the main buildings was located the most tragic settlement one ever cast eyes upon—the incurables, isolated in grass huts, waiting to die. Most of them were women, with all the horrible diseases imaginable, including leprosy. Some were very close to death as we viewed them.

THE RIBS OF AFRICA'S IMPERFECT RAILROAD SKELETON

Sixty-seven people are said to have been killed by lions in the Tabora district during the same year that we walked from Mwanza to Tabora. The preceding six months, bounty had been paid on the carcasses of more than 300 lions and 800 leopards. Elephants and elands had played havoc with native crops. One elephant can ruin a banana plantation in one night. These were the grim statistics that lurked behind the adventure of our walk.

From Tabora we traveled to Kigoma on the Dar-es Salaam railway, which operates from the seacoast to Lake Tanganyika. This railway and the line from Mombasa inland to Lake Victoria are two ribs of a most imperfect skeleton. Rhodes' imaginary north-and-south All-Red Route was to be the spinal column. The Belgians have another broken rib reaching in through the Congo toward the same missing backbone.

When we left, the Tabora majors and their friends, the hotel proprietor, and, lastly, the bishop of the White Fathers, came down to the station to say good-bye and good luck. The bishop presented us with a snapshot of himself.



Photograph from Gardiner F. Williams

THE TOMB OF CECIL RHODES, WHOSE DREAM IT WAS TO ESTABLISH THE CAPE-TO-CAIRO ROUTE (SEE TEXT, PAGE 251)

The man who did so much to mold South Africa's development chose the site of his own grave on a granite peak in the Matopo Hills of Southern Rhodesia. The tomb, carved out of solid rock, commands what Rhodes called the "World's View." Near him, in a similar rock-cut tomb, lies Leander Starr Jameson, "Dr. Jim," his lifelong associate and friend.

A trader in Tabora told us that the country roundabout had not been prosperous since the railway was completed in German days. The only prosperity German East Africa had ever known was while there was a railway-construction pay roll. Now all signs and portents indicated that the railway itself was a poorly paying proposition.

The hour or two that remained of daylight showed us only barren hills; when we awoke at daybreak, a ragged country of hills and valleys, an overgrown jungle. This was the country Stanley marched through to find Dr. David Livingstone. Of course, Livingstone was not lost. When Stanley "found" him at Ujiji, the self-sacrificing missionary refused to return.

Livingstone dedicated and gave his life to the blacks. He spent some 33 years in the African interior and died out there two years after the Stanley episode.

An hour before we arrived at Kigoma we caught sight of Lake Tanganyika. Livingstone made his headquarters on the shores of this lake, fighting his fight against the Arab chieftain Tippoo Tib and his slave raiders.

The jet-black natives at Kigoma were of a much more primitive mold than the breed at Tabora. Not all Negroes in Africa are black; several tribes are dark-brown and light-brown.

These Tanganyika natives indulge a distinctive vice. They snuff a hot-stuff solution up the nostrils, then fasten a pair of wooden tweezers on the nose, so none of it escapes. While they wear the tweezers, blinding tears stream from their eyes.

A RIDE TO UJIJI IN A RICKSHA

A dozen of the dark citizens put our bags and boxes on their heads and delivered us to the little Hotel Tanganyika.

These African hotels are unique institutions.

There's a building with two public rooms, and a barroom and a dining room operated as one. Beyond, adobe huts provide sleeping accommodations. One gets a complete hut for his own light housekeeping. Black boys bring water for the baths from the near-by lake. Washing is done in the back yard while one waits. There is good-enough food, better company, cold drinks, and a porch deep with shade that dominates Lake Tanganyika. What more could one ask for?

At sundown all the white men within walking distance come in for a "sundowner." It is considered unwise in Africa to drink alcoholic beverages before the sun sets. These soldiers of fortune roll dice for drinks uproariously on the hotel porch.

An Englishman whom we chanced to meet invited us to play tennis. Wherever there are English on the earth's surface, there they have grubbed out a kind of tennis court. Practically all of the English fellows we met in Africa were thoughtful and considerate. Many of them were exceptionally fine.

Along the lake, five miles from Kigoma, is Ujiji. The mango tree under which Stanley met Livingstone still stands (see text, page 218).

There were no horses, no donkeys, no autos in Kigoma. But, ah, there was an ancient ricksha, with heavy cart wheels. This Porter appropriated; I walked. It required the strength of five stalwart blacks to transport the 110-pound lady over the hills to Ujiji (see page 216).

ON THE SPOT WHERE STANLEY MET LIVINGSTONE

Ujiji appeared to be a university town in mud, with shady dim streets.

The Arab and his blood influence are still there. We passed mud mosques where Mohammedan prayers were being chanted by the faithful of many hues and shades. For all his sins, the Arab is one of the strongest and brainiest individuals the world ever produced. Show me a black boy in Africa with one per cent Arab blood in his veins and I will show you one who is smarter than his fellows.

Old Arabs in doorways stood and saluted us and we saluted them.

Here, as elsewhere, the Arab is an anachronism.

Nothing is changed, except that the lake has receded 100 yards from the old mango tree, which was directly on the shore when Stanley and Livingstone conferred under its dense foliage.

The tree was dying of bugs and neglect. Under it a scarred stone, tumbled on its side, bore the legend, "Livingstone-Stanley, 1871." The corner was broken off it, the edges chipped. It was foul with refuse. The stone rested, tiptilted, thrown down carelessly, as an unwarranted obstruction in the middle of a dusty native street.

No fence around the tree, or stone; no protection or care given to either. Yet there was an English "government house" in Ujiji. Such sights are inexplicable.

We photographed the tree and the stone, and included one of a group of naked little black boys (see illustration, page 218). He came when called, fearlessly, and departed unharmed, largely because of the life Livingstone lived and the death he died.

We expected the boat to arrive at Kigoma next morning to take us to Albertville on the Congo side of the lake, but it did not arrive until late evening. African boats make a specialty of being from two hours to two weeks or two months late. Unless the gods are good, the traveler sits on the edge of a fever river or lake and waits, and waits—and waits.

Late that afternoon a band of natives brought in a gigantic leopard and a black-maned lion, both dead. A licensed native hunter had killed them near by, where they had been terrorizing a village. Up behind the hotel the natives made a celebration of skinning them. We could have bought this beautiful leopard skin for $5.00, but it was uncured and we were on the move.

Once aboard the Belgian boat, we found the week's wash strung about the deck and the officers themselves in carpet slippers and suspenders. The wives of officers of various grades travel on these boats. We elected to return and dine on shore and only to sleep on board.

It is a night's ride across Tanganyika; we reached Albertville, in the Congo, at daybreak.

Photograph by the Rev. Arthur J. Orner

THE BROWN MAHOGANY TREE OF SOUTHERN RHODESIA

Silinda forest, although covering a small area, has a number of trees found nowhere else in the world. The brown mahogany is peculiar to it. This specimen is 105 feet tall (see also page 177).

The customs official at Albertville, it seemed, had received quantities of American cigarettes and other American favors when a soldier in the World War. He felt a personal obligation to Americans. "You are voyagers; pass on." He did not trouble to open our bags.

At Albertville we endured our first Belgian-African hotel. The only comparable establishment is an Inca Indian-kept mud shack on the shores of Lake Titicaca, in Bolivia. Each meal was interrupted while the black boys killed rats under the tables on the dirt floor. The sleeping accommodations were in vermin-infested all-grass native huts.

The only pleasant hours in Albertville were those spent at tea with the university-bred commandant and his wife.

THE CONGO WOMEN ARE THE BEAUTIES OF AFRICA

The Congo black women of this region are so voluptuous-looking as to appear almost deformed. They are brown in color, with faces tattooed in blue, and bosoms and backs decorated with raised welts. They tie their hair under their chins and around their heads flaunt gayly colored kerchiefs. Some of them wear multihued soft cotton draperies. The effect is very "Frenchy." No other blacks that we saw in Africa are so colorful or so hold the eye as these Congo women.

The Congo men are undersized nondescripts. In comparison with these opulently attractive women, the stripling men seem extremely puny.

For the first time in Africa we observed black women with shapely limbs, according to musical-comedy standards and specifications. Heretofore all legs had been fat or skinny, but shaped like poles. The Congo women had slim ankles and graceful calves.

These natives also had style; they wore their bright calicos with a swagger. Their faces were not pretty, but animated. They were alert mentally, too; they called after friends and laughed loud and long, and seemed to have much energy. They were in constant motion.

Many upcountry natives are very apathetic in comparison.

A most attractive group of brick cottages was being built in this town on two hills overlooking Lake Tanganyika. When completed, Albertville should be the model station for all Africa. The British had nothing like it in the territories we had traveled through.

It is unintelligent to expect a white man to do effective work in Africa when he is housed like a savage. Throughout the central portion of the continent, most of the Europeans live in so-called houses which are very little better than the native huts, only, of course, they are kept up better.

A nice brick house, small and comfortable, like those Albertville creations, would improve the health, the morale, and the quality of the work of the officials in Africa generally. Besides, they show the natives how the white man lives when he is at home. They teach much by example.

At tea the commandant asked: "What is a 'dee-dee' in America"?

"I do not know. Only last week I learned what a 'doodoo' in Africa is," I replied.

It was a joke in one of the American comic weeklies he wished explained. The golfer inquires, "Doctor, before I try to get this ball out of the bunker, would you mind telling me whether you are a D. D. or an M. D."?

I had the honor to explain to the Belgian.

Toward the Congo River we saw skeletons of huts, like giant rattraps, in clearings.

Some years ago an end was put to cannibalism in the Congo along the rivers and railroads, but in the interior it is said that the situation is not much changed. Two hours back in the bush one is 20,000 years back in history.

Along this route the natives are raw, the clearings few, the forest dense; living is most primitive.

THE HOTEL AT KABALO CAUSES A RETREAT

There is much sickness, plague, and what not in this Congo. Without a sufficient number of intelligent white men to fight them, the bugs and germs simply have the better of it. The insidious climate, too, is on the side of the germs.

On the train bound for Kabalo we met the Arab Sultan of Zanzibar. He was

polite and suave, with a pronounced Semitic cast of countenance.

Dark came. There were no lights on the train. We sat in the smelly car and wished for the end of the all-day journey. We stopped. "Is this Kabalo?" Nobody was sure. Somebody "thought" so.

We dropped off into the pitchy dark and impressed into our service enough blacks to carry our baggage somewhere.

The blacks led off and we followed.

Yes, this was Kabalo; there was a hotel.

The hotel man met us at the door with a lantern.

"Where are you from?"

"We are from Albertville."

"Mon Dieu! and Goodness Gracious! I had forgotten that this is the day the Albertville train is due!"

BELGIAN OFFICIALS BEWAIL LONG CONGO JOURNEY HOME

While we ate dinner we heard the whistle of the river boat, bound north for Kongolo. We were bound south, but rather than stay at this unpromising hotel we decided, on the spur of the moment, to go aboard the northbound boat and come back again.

Ten minutes after we had finished dinner we presented ourselves and our baggage to the little blond Flemish-Belgian captain, who kindly made room for us.

There were 10 or 12 Belgian officials on this boat, all bound for Europe via the Congo River and the Atlantic port of Boma. Since the World War, Belgian officials have been forbidden to go to Europe via the much more convenient way of Cape Town. At least, passage is no longer furnished them from that port.

The Belgian Government desires this passenger travel for Belgian boats; so, instead of a six days' journey from Elizabethville to the Cape, the colonial officials must travel many, many tiresome days over tortuous routes through the northern Congo.

This all-Belgic route is extremely unpopular among the officials. They take every occasion to voice their displeasure. Often, when some ordinary accident overtakes and delays them in the interior, they are 40 to 60 days en route through the Congo country.

The time distance between Kabalo and Kongolo is about six hours. We sailed at daybreak and arrived at noon.

The scene down-river was a dream of beauty. Here landscapes worthy of the art of Whistler and Corot are found, with tropical vegetation toned by one of the mighty rivers of the world.

While sailing north we sailed down. The American mind always thinks of north as "up." One travels "up" south in Africa.

Because of rapids, a boat may not navigate north of Kongolo, a settlement of sorts, with two or three stores, a few shacks for stranded Europeans, and the usual native background, on the bank of the Lualaba (the Upper Congo).

One would prefer to pass quickly over the hotel at Kongolo, but because this establishment has a contract with the boat company to furnish dinner to passengers while in port, it must be noted. Suffice it to say that, after two experimental meals, we preferred to dine on tinned sardines of uncertain age, soda crackers, and beer.

The hotel itself was an old, condemned, nearly native structure. The place was filthy. The boys who waited on the table were in ill-smelling rags. The food was nauseating. From meal to meal the butter and bread, jam and sugar, stood uncovered on an open shelf for the flies and the guests.

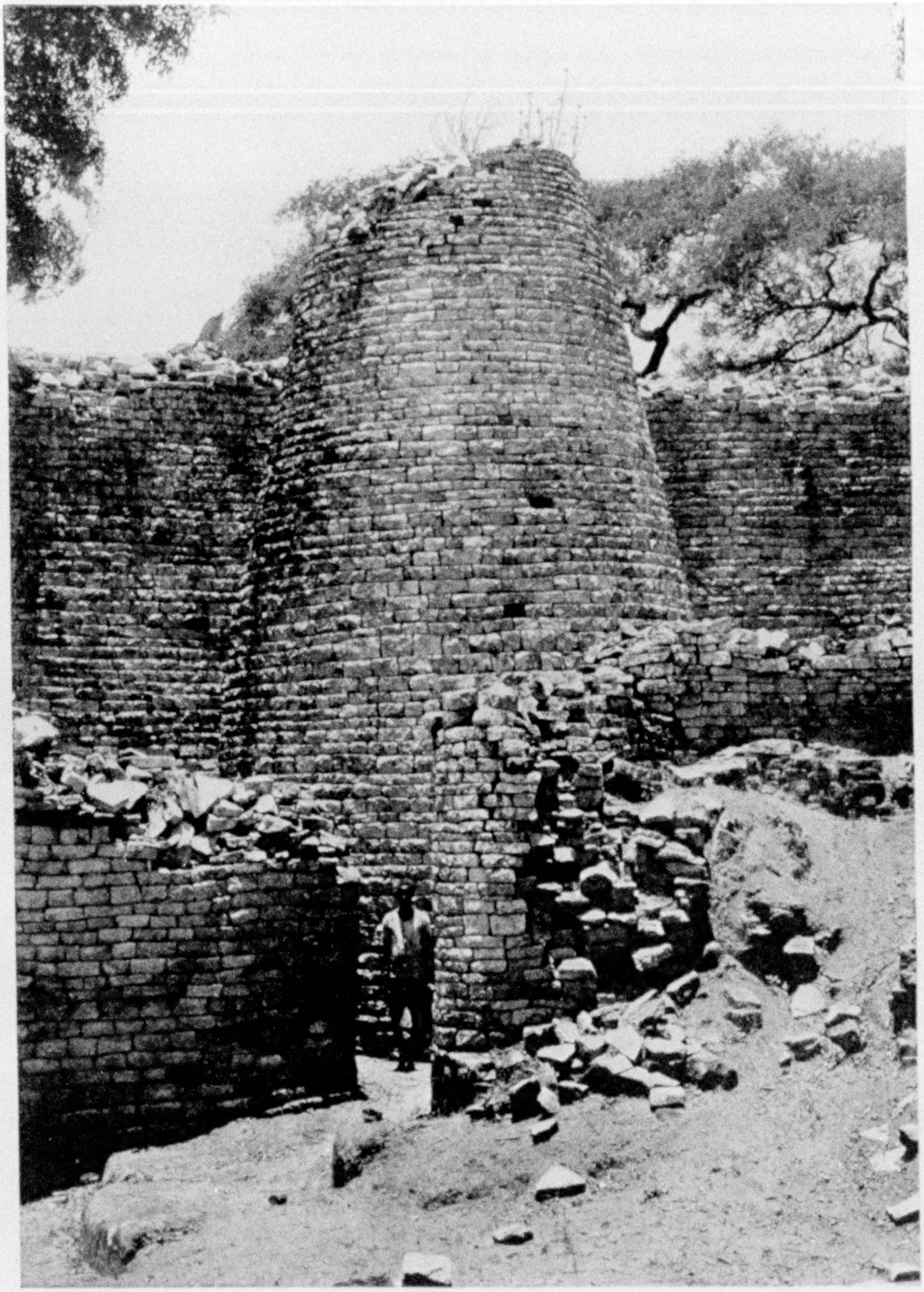
When there is a choice, one can ignore an institution of this kind. When there is no choice, the situation becomes desperate.

The Belgians in the Congo are negligent in their treatment of travelers. What is more to the point, they seem to look upon Americans and English as unwelcome guests, who may be there to exploit the country.

NIGHTS OF TORTURE AT KONGOLO

We were obliged to wait at Kongolo approximately four days and three nights before the boat sailed south for Bukama, the railhead of the South African system. These were days of torture, and torture does not describe the nights.

The sun was so intense, it was next to impossible to move about. We stayed on board and tried to sleep the days away, because at night, without a breeze blowing and the boat at anchor, the mos-



Photograph from G. H. Nutting

A TOWER OF MYSTERY IN RHODESIA

At Zimbabwe, near Bulawayo and near Cecil Rhodes' tomb, is a 30-foot conical tower of small cubes of hand-tooled granite surrounded by strewn evidences of a long-deserted settlement. The history of these ruins, as of the near-by Khami ruins (see page 251), is one of the unsolved mysteries of Africa.

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quitoes wriggled through the netting and drove two more or less sane people nearly crazy. These mosquitoes were highly infectious; five minutes after these tormentors stung one, the flesh would swell and burn for an hour.

Sleep was absolutely impossible.

Occasionally the good-hearted little blond captain, at the risk of his job, invited us to a meal aboard the boat, but he dared not risk this when anyone was about. So two-thirds of our meals were out of tins and cracker boxes.

This Congo basin is disheartening. First of all, Belgium, a tiny country, is trying to organize, manage, and monopolize a vast Equatorial empire which is 77 times the size of the mother country itself. The tail is trying to wag the dog. The Belgians have neither the funds nor the men nor the experience to do it.

The men who are in the government service in the Congo are working for an insufficient wage, with despair written on their faces. They adventure out there to make their fortunes. Disillusionment comes quickly. Soon they are wondering if they will ever get back home to Europe. They quit trying to keep up appearances, which is fatal in the Tropics.

BLACK WOMEN CARRIED AS SUPERCARGO

The boat left for Bukama at 4 a. m. But long before that hour we were on the bank waiting, with all our baggage, for the first sign of life on board.

On the trip south we transported several Belgians, an Italian contractor, a couple of Greek traders, a Rumanian Jew, and a swarm of blacks.

More than one of these white gentlemen carried a black lady as supercargo. The black women were in the steerage, while the gentlemen were in the first cabins. The difference was a thin partition.

Many in the Congo openly consort with the black women. When we anchored at night—and we always stopped at night because it was unsafe to go forward in the dark—they greeted and fondled and acknowledged their half-caste children on the shore. More than one said to me, "This is my child."

At night the blacks would go ashore, build scores of little camp fires on the bank, cluster around them, and make a hubbub with their small talk.

There was no ice on board, and so each day we shot our meat from the upper deck. We would kill an antelope grazing along the bank. Then the ship would stop, a dozen blacks splash ashore and drag back the carcass, to be served for dinner. This meat is not unlike, but is inferior to, mutton—at least, as it was served to us.

We ate several varieties of horned animals in Africa. One must develop a taste for such meat.

These wild creatures were beautiful in action. When killed they proved to be vermin-covered and not pleasant to see.

THE ONLY SHOWER BATH CONVERTED INTO A STOREROOM

There was one shower bath on this boat for the several white passengers, which might seem to indicate a complication. There was no complication at all; the bathroom was used as a storage room and was not available for its ostensible service. For eight days we dipped pails of water out of the Lualaba each morning and tried to maintain our morale.

The natives were everywhere. We were obliged to pass through them, brush shoulders with them, climb over them, to get to our cabins. They carried all sorts of live animals, including goats and chickens, and a plentiful supply of well-dead meat. The odor was indescribable and unavoidable. It permeated the atmosphere by day and suffocated us at night.

One day I came out of my cabin suddenly and bumped into a native carrying the head of a goat past our door. A million flies followed. I launched a kick at him.

The same sort of boat on the Nile, under British command, was clean and shipshape and the native passengers uncontaminating quantities.

On this boat the first-class cabins were on the lower deck, among the natives. The man who designed the craft for Congo River traffic must have been a madman. At night swarms of mosquitoes distributed their favors and fevers indiscriminately between us and the blacks; passed from one to the other and back.

Photograph by Porter Shay

THE AUTHOR AND THREE MATABELE GIRLS IN KILTS (SEE TEXT, PAGE 252)

When the Matabele warriors were pacified, some 28 years ago, they became a tribe without an occupation (see text, page 249).

These blacks were covered with vermin, not excluding the women who belonged to the white men.

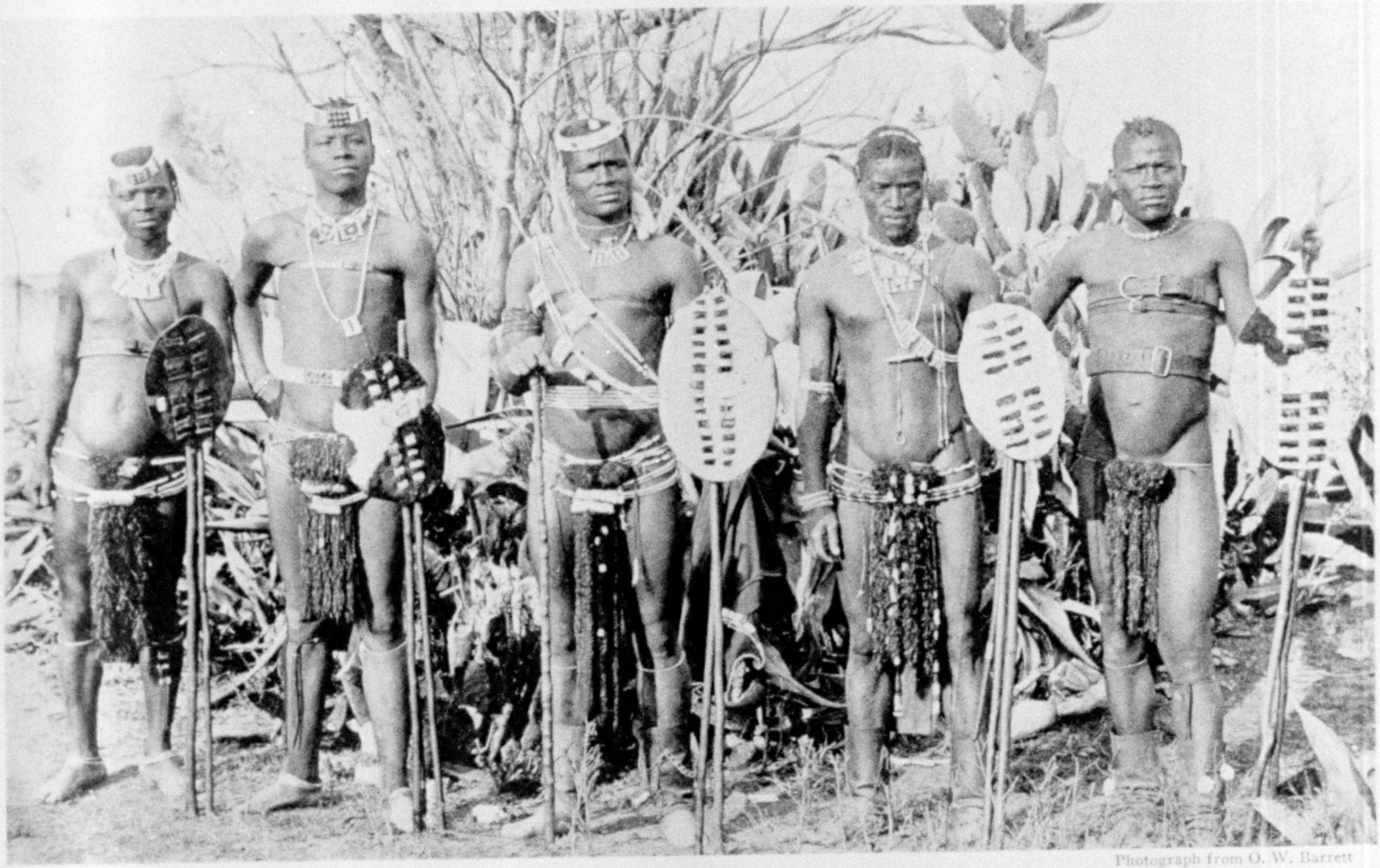
UNTRUSTING BARTER BETWEEN NATIVES

The Congo is the typical tropical river of the imagination, with banks bordered by high-shooting palms and gorgeous jungle. We passed conical grass huts and native villages at every turn in the stream.

One day we saw an impressive sight, a roaring grass and forest fire started by the natives to clear the land and to chase off wild animals. Intense heat waves and volumes of black smoke swept over us. The whole world seemed on fire.

When we stopped, natives on board traded bananas for fish with those on shore. One native waded out to the ship and proffered the fish. Then the banana was projected by the one on board. Both grasped the banana and the fish. At a given signal the exchange was supposed to be made. But one day a smart native on shore pulled the banana out of the hand of the native on the boat without relinquishing the fish. He decamped with both. We watched him run until the jungle hid him from view.

When we stopped at a trading post, a single shack managed by Greeks, we were treated to beer, and exchanged much gossip. When we stopped at the post where



Photograph from O. W. Barrett

WARRIORS OF A CRACK ROYAL ZULU IMPI

The shields are of a model prescribed by King Chaka. This cruel tyrant, whose people were the scourge of South Africa, said no warrior in his impis, or regiments, would wish to protect from the spear thrusts of his enemies any part of his body except the abdomen; hence the tiny shield. The Zulu is a magnificent physical type. A large percentage of the warriors are more than six feet in height and the women are almost as tall. Their color is a brownish-chocolate shade.

the Rumanian left, he presented Porter with two little otter skins. This boy had been in the country for some years. A few months previously his partner, a newcomer, while swimming in the forbidden river, was eaten before his eyes by a crocodile.

The scenery along the Congo was much more varied and much more beautiful than along the Nile, with palms and mountains, vines and valleys. There one saw the Tropics as one hopes to see them—luxuriant, gorgeous, riotous.

As we proceeded up the river, going south, there was a marked variation among the native tribes. Often when we passed a village the natives swam out to us through the crocodile-infested waters and begged for bottles.

We shot at these crocodiles from the upper deck.

One day a Belgian officer sniped one that was lying on a sand bank. The bullet seared the reptile's spinal column. The pained animal jumped fully six feet in the air before it finally took to the water.

At Mulongo a Belgian official and a company of native soldiers were attempting to quell an incipient rebellion. The Belgians had deposed an old chief who took to the hills. Once in so often he raided the villages of his successor.

The blacks were in sympathy with the "true" chief, so the Belgian officer had a job on his hands.

ELEPHANT MEAT IS ADDED TO THE ODORIFEROUS CARGO

One day we stopped at a station where a young English trader came on board. He was escorting to Elizabethville a supply of sliced elephant meat, with the tusks and the hairs of the elephants' tails as additional baggage. After a few days this elephant meat lent a new odor to the already supercharged air. The young trader gave Porter an elephant hair bracelet as a charm to placate the olfactory sense.

The natives take these heavy hairs, fully one-sixteenth of an inch in diameter, and make bracelets and rings, which are considered very ultra in Africa and mark the man of the interior.

The Belgians want the natives to come back to the river bank to make tax-collecting easier, but the natives prefer the jungles.

On occasions we passed long canoes with as many as 40 paddlers, a white man under a straw thatch. In the bow there were usually three beaters of drums. The paddlers cannot do their work unless the drums do theirs first. When we went by, the drummers put on style and the blacks shouted and redoubled their efforts.

Once when we caught up with such a canoe going south they raced us for a full mile and held their own with the steamboat, while they poured perspiration and shouted themselves hoarse.

TALKING DRUMS USED BY NATIVES

The Englishman told us numerous stories of the black folk at his station. A boy clawed by a lion was placed by his people in a canoe filled with water, and sloshed back and forth for hours. The wounded boy's head almost exploded with fever. Then he died. One black stole the Englishman's shoes and some of his equipment. The Englishman sent for a witch doctor. The blacks were lined up. The witch doctor put a little seed on the inside of the upper lid of the eye of the man he questioned. Then he commanded, "Take it." If the eye rejected the seed, the man was innocent.

When he reached the guilty man, some reaction of the nervous system turned the seed back into the eye socket. That the guilty man was guilty was proved by the fact that the stolen goods appeared on the porch of the Englishman's shack next morning.

This raconteur informed us that the African natives have talking drums. Yes, they talk. They speak the native language, not a dot-dash system. The drums actually reproduce words, he said. The average drum can be heard for 10 miles, and some of the big ones can be heard for 16 miles.

We had heard these drums all night on countless evenings out in the blue.

With drums the natives communicate with each other, according to our informant, and send the news, whatever it may be, from village to village.

After being stuck on a sand bank for 18 hours, our boat arrived at Bukama in

Photograph by Alfred I. Hart

"EYES RIGHT": A QUARTET OF KAFIR MOTHERS

time for us to miss the train going south; so we had another two and a half days' wait. Such unwished-for delays are a never-failing feature of African travel; they add much local color to the journey.

The hotel at Bukama was well managed. The place was clean, the food entirely acceptable.

After dinner the dining room was cleared for dancing. An American phonograph played "Oh, You Beautiful Doll" and "Everybody's Doing It," and other selections strictly of the pre-war period. The gentlemen paired off and danced together.

Certain of the Belgian officers were very pleasant, agreeable fellows, especially the newcomers, and those who had positions which were sufficiently remunerative—those who still had hope.

At mealtime we heard a Belgian officer rebuke a native serving boy. He said, "You Ba-luba!" The word sounded most insulting. Later, we discovered that "Ba-luba" was the name of the boy's tribe. The boy was both rebuked and shamefaced. It is no sport for a savage to be called a savage, particularly when he hopes he isn't.

The third night we boarded the train for Elizabethville. By this time we had exhausted our money. There were no banks from Nairobi to Elizabethville.

We had just enough to purchase two second-class tickets. But a Flemish-Belgian official of influence, with whom we had dined and danced at Bukama, placed us in a first-class compartment and overlooked the slight discrepancy in the fare.

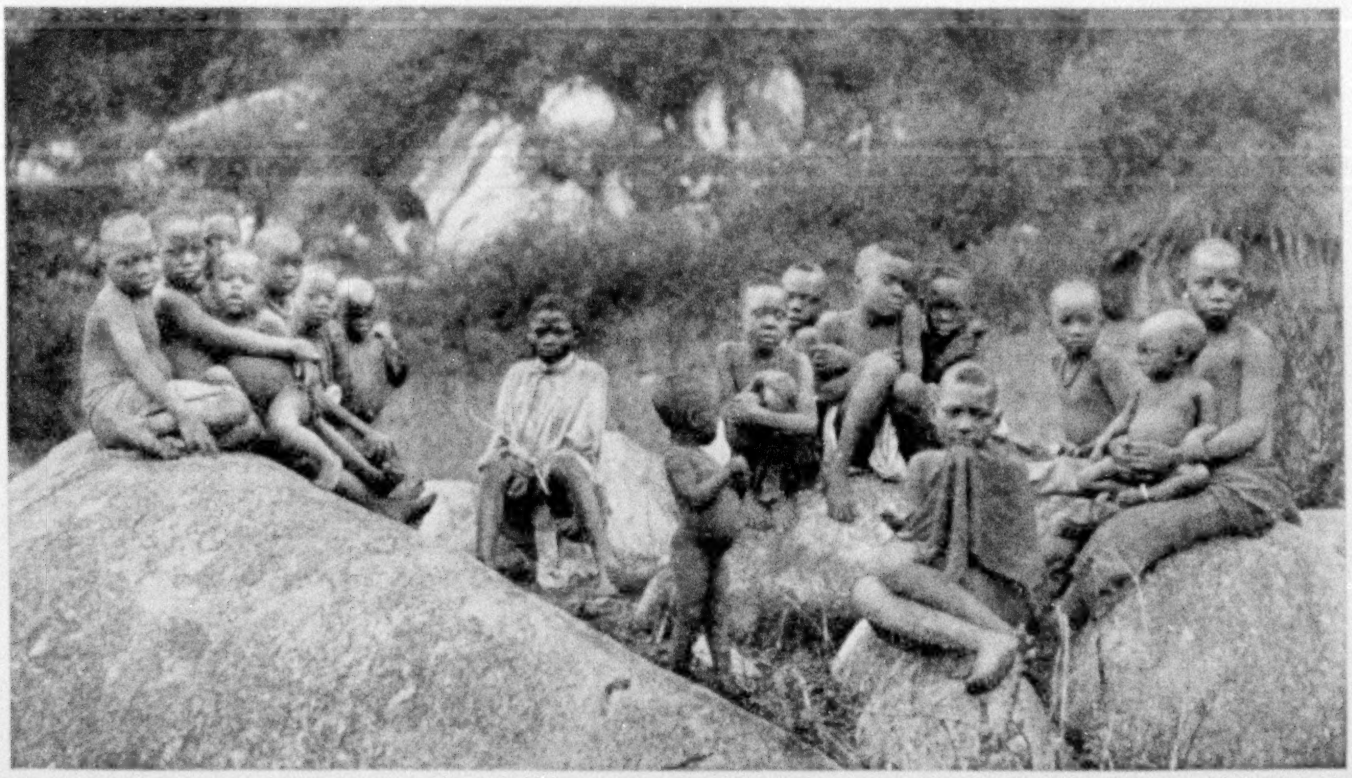
ELIZABETHVILLE PROVIDES COMFORTS OF CIVILIZATION

When we arrived at Elizabethville, the Congo outpost of civilization, we found it necessary to borrow carriage hire from our English friend to get to the hotel.

The blacks called Stanley *Bula Matari*, the Rock-breaker, the Road-maker. They apply the same descriptive title to the Belgians as a class.

Elizabethville, named after the Queen of the Belgians, is the social and trade center for the Bula Matari in the Congo.

In Elizabethville we fraternized with the young Englishman who came from the heart of the Congo with us, and with several of his friends. We enjoyed life immoderately. This was the first vestige



A SWARM OF RHODESIAN CHILDREN

The African native thinks neither of the past nor future. His great sense of humor is a saving grace, and he is blessed with an ear for music. He will amass property, but makes little use of it to change his mode of life, beyond buying additional wives.

of civilization after many weary weeks. In Elizabethville they had ice and edible food, clean beds, and other symbols of luxury.

Here my fever blazed up again, and I applied quinine and philosophy in equal parts.

Elizabethville is a typical tropical town of wide streets, one-story houses, a few central stores and bars, a motion-picture theater, a bank or two, buildings for the officials, and such. The whole covers a tremendous area.

In these tropical towns one wears out his legs walking from the railroad station to the post office, and from the bank to the hotel. Though we walked 16 miles a day in the blue and did not object, in town we protested at the unnecessary half mile.

BRITISH AND AMERICAN ENGINEERS ARE OUSTED

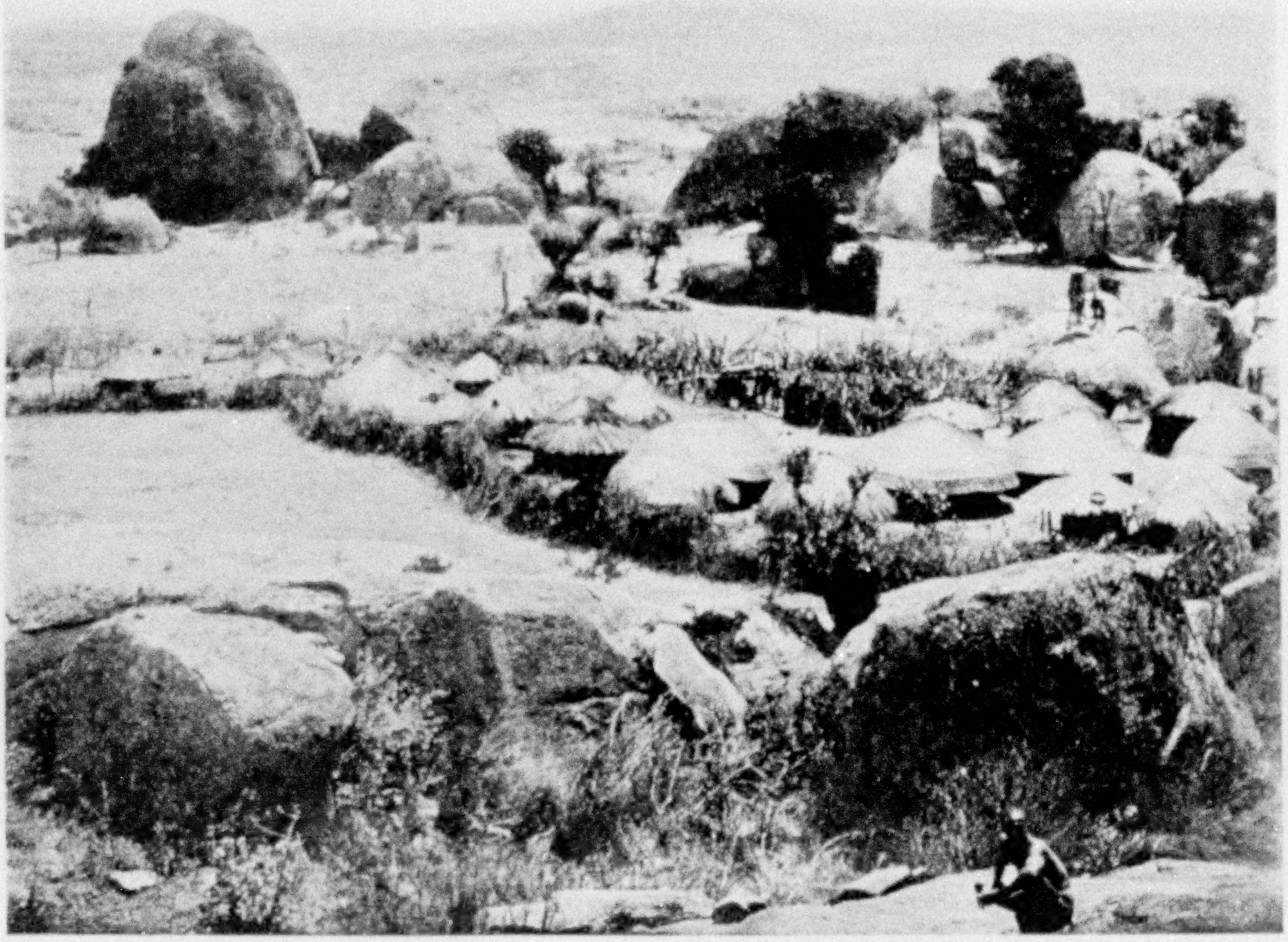
Elizabethville enjoyed special prosperity during the World War period, because of some extraordinary copper mines, with gigantic smelters, in the near neighborhood. These employ thousands of blacks and enough white men to keep them in order.

Up to the present the brains in charge of these mines in the Congo have been either American or British. Since the war the Belgians have made it a definite policy to get rid of the Anglo-Saxons. Already they have succeeded in letting out 80 per cent of them. They seem to fear that the British want to take the Congo by peaceful penetration. What they fear from the Americans is more difficult to determine.

Since the war hard times have settled on the Congo, and on Elizabethville particularly. Most of the transactions in the Congo are settled with *bons-pour*. A bon-pour is the Belgian equivalent of an I O U. One accepts such a slip of paper and waits for the money. Sometimes he gets it; oftentimes not. Bankruptcy was the order of the day in Elizabethville.

We waited in Elizabethville for about five days, until the banks cabled and cabled again for money for us. These bankers in the Congo are the most suspicious men on earth; they have a right to be. Adventuresome gentlemen, in the habit of contracting obligations, leave the Congo in the dead of night without formalities.

In an effort to check such practices, the Belgians have a law to the effect that



NATURAL ROCK WALLS OF A MATABELE KRAAL IN RHODESIA

Taking advantage of a convenient rim of rocks, natives have built a village. As a further measure of precaution, they have raised a brush palisade around their huts. "Kraal," throughout South and Central Africa, means a protected village. This settlement is situated among the boulder-strewn Matopo Hills (see text, page 251).

if a gentleman wishes to leave the Congo he must first put his name on the public bulletin board for three days, to give his creditors a chance.

The next train south would not be along for some days. There was nothing to do but to stroll about, and visit, and trade yarns with our English friends.

GOLF AMONG THE ANT HILLS

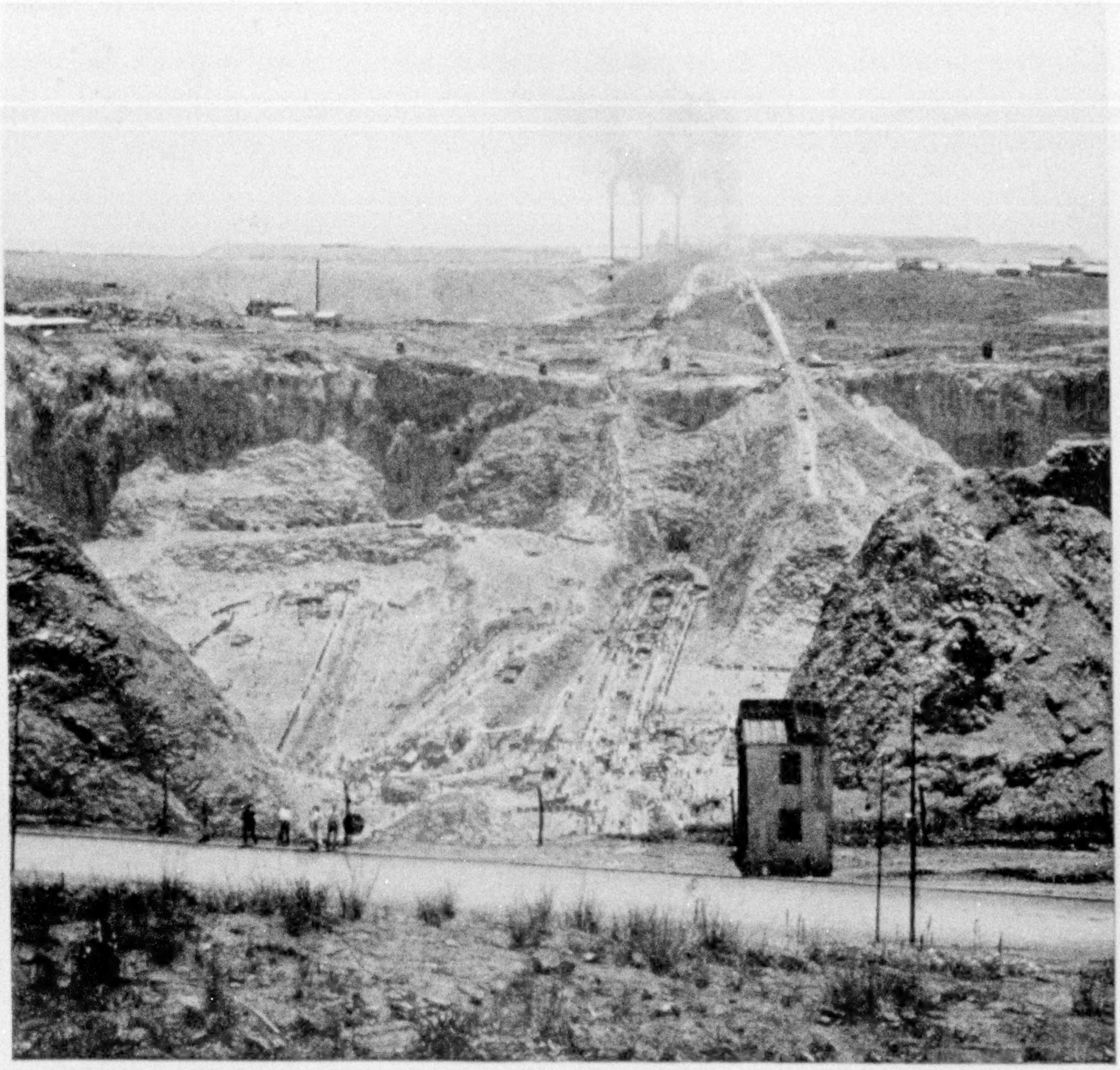
We visited the Elizabethville Golf Club, consisting of a very small one-room shack and lots of scenery. On this golf course they have some six hundred ant hills. To reach a green one must learn to carom the ball off successive ant hills. We saw gigantic ant hills that were being used as garages (see page 227).

Round about Elizabethville are scrub forests and miserable clearings.

The Congo is the most wonderful metal country in the world, but the land is rough and ragged. These metal deposits are owned by a monopoly. Lone prospectors are not encouraged.

There is little chance for an individual in the Congo. The only opportunity open except for small and inconsequential trading with the natives, is to die of fever.

The Belgians here refuse to talk English. They insist that one talk French,



Photograph from P. Mitchell

THE PREMIER DIAMOND MINE, NEAR PRETORIA, TRANSVAAL

Here was found the famous Cullinan diamond in 1905, weighing one and one-half pounds. In 19 years of operation the mine yielded 22,000,000 carats of diamonds from 95,000,000 tons of earth. Excavated material is hauled by machinery to the washing plant, marked by smokestacks.

even when they are familiar with the English tongue. I was glad to converse in what-I-call-French. They were fittingly punished by being obliged to listen.

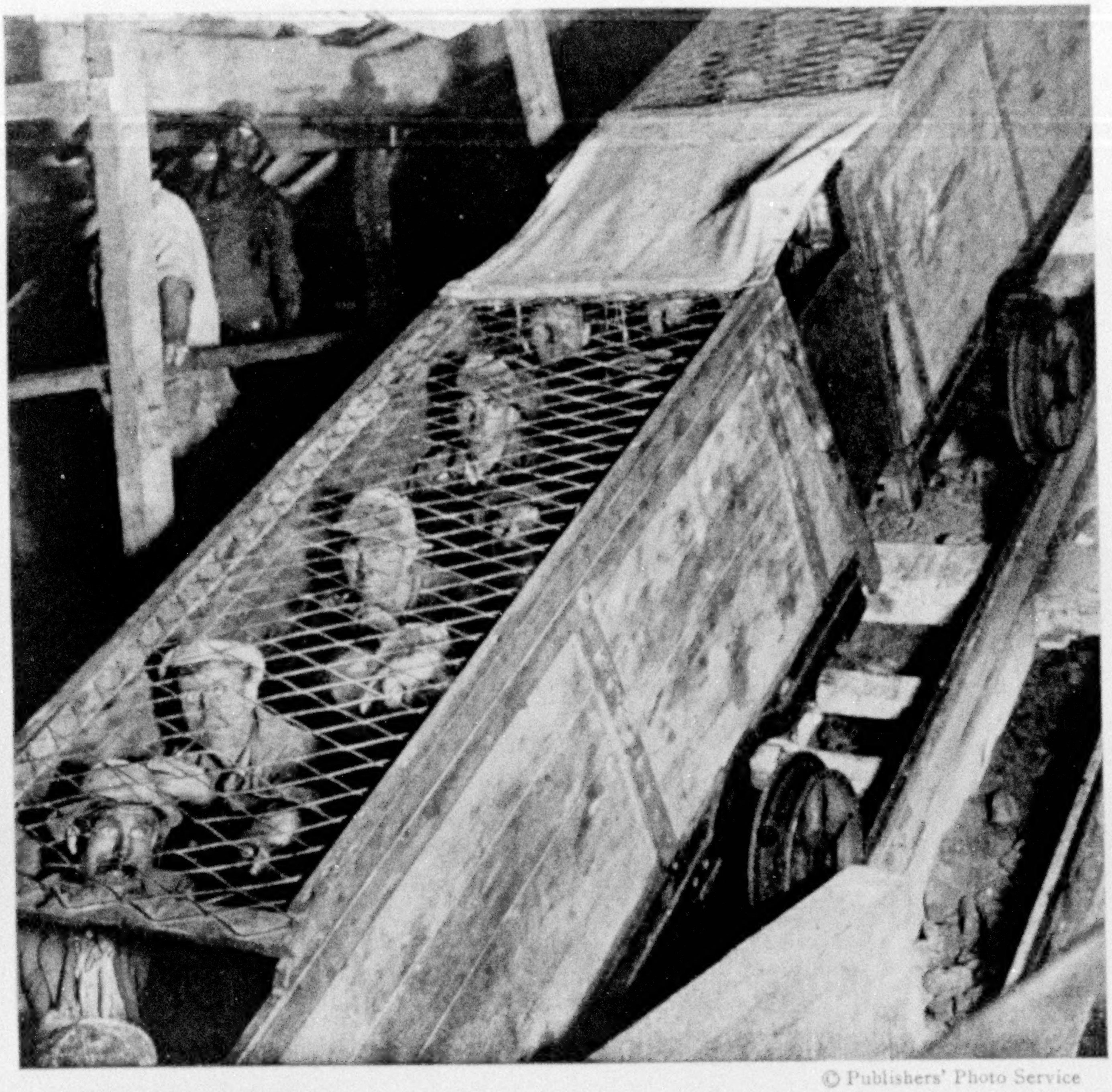
All blacks, of course, go barefoot. I noticed their feet were seamed and cracked, some with deep fissures. Many had sore feet. This business of being a happy, care-free savage is overadvertised.

All waiters in hotel dining rooms go barefoot. Back in civilization again, this seemed strange and somewhat unnecessary to us, but a young Englishman insisted, "I make all my boys go barefoot in the house. It saves noise."

Social clubs in the Congo, such as exist in British possessions, have difficulty in surviving because the official Belgian, once he lands, starts to counting the number of days before he will sail for home again. Therefore, when he is asked to join a club, he replies, "What is the use of joining a club when I have only 112 more days to remain here?"

They seem to have but one interest—to finish their three years, take their savings, and go back to Europe.

At the mines the officials of a certain class are entitled to a five-room house. An Englishman who was employed designed



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A MINE CAGE DESCENDING A SOUTH AFRICAN GOLD MINE

The wire screen over the cars is to protect the men from falling rocks.

a five-room house plus a bathroom. They said, "You are not entitled to a six-room house. That bathroom makes it six rooms." He answered, "A bathroom isn't a room; it is a religion!" (He got the bathroom.)

An Englishman said to me: "My little girl goes to a private school here. There the children bathe once a week. We insisted that she have a daily bath. Because we insisted, an exception was made in her favor. Now the other children think there must be something the matter with her because she has to bathe every day."

We entered Rhodesia, the most northerly of the South African states, at Sakania, approximately 150 miles southeast of Elizabethville.

AMONG THE MATABELE, MEN WITHOUT AN OCCUPATION

Rhodesia, from this station southward, is a ragged, broken, tree-covered country, tremendously rich in mineral resources. As in the Congo, concessions have been granted to powerful groups. The lone prospector is very much an outsider. Should he discover gold, diamonds, copper, when he goes to register his claim he finds the land already let to a concession.

All day, from Sakania to Broken Hill, we traveled empty, desolate country. Na-

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COOKING IN THE COMPOUND AT A KIMBERLEY DIAMOND MINE

Natives who enter the employ of the mine live in the compound until their contract is up. The government gets much revenue from mining operations; diamonds alone are taxed 60 per cent.

tive kraals appeared in clusters. Occasional white settlements were usually a group of half a dozen one-story shacks. We stopped at railroad stations set out in the blue, with no houses near. Round these lone stations natives appeared in breechcloths and assorted semicivilized rags.

These natives are in an in-between period, neither savage nor civilized. They are the once-dangerous Matabele, who were on the warpath as late as 1896, when they gave Cecil Rhodes and Dr. Jim (Sir Leander Starr Jameson) a rather busy time.

After that fracas the Matabele learned the futility of war. They threw away their shields and spears and returned to their kraals, broken in spirit (see p. 246).

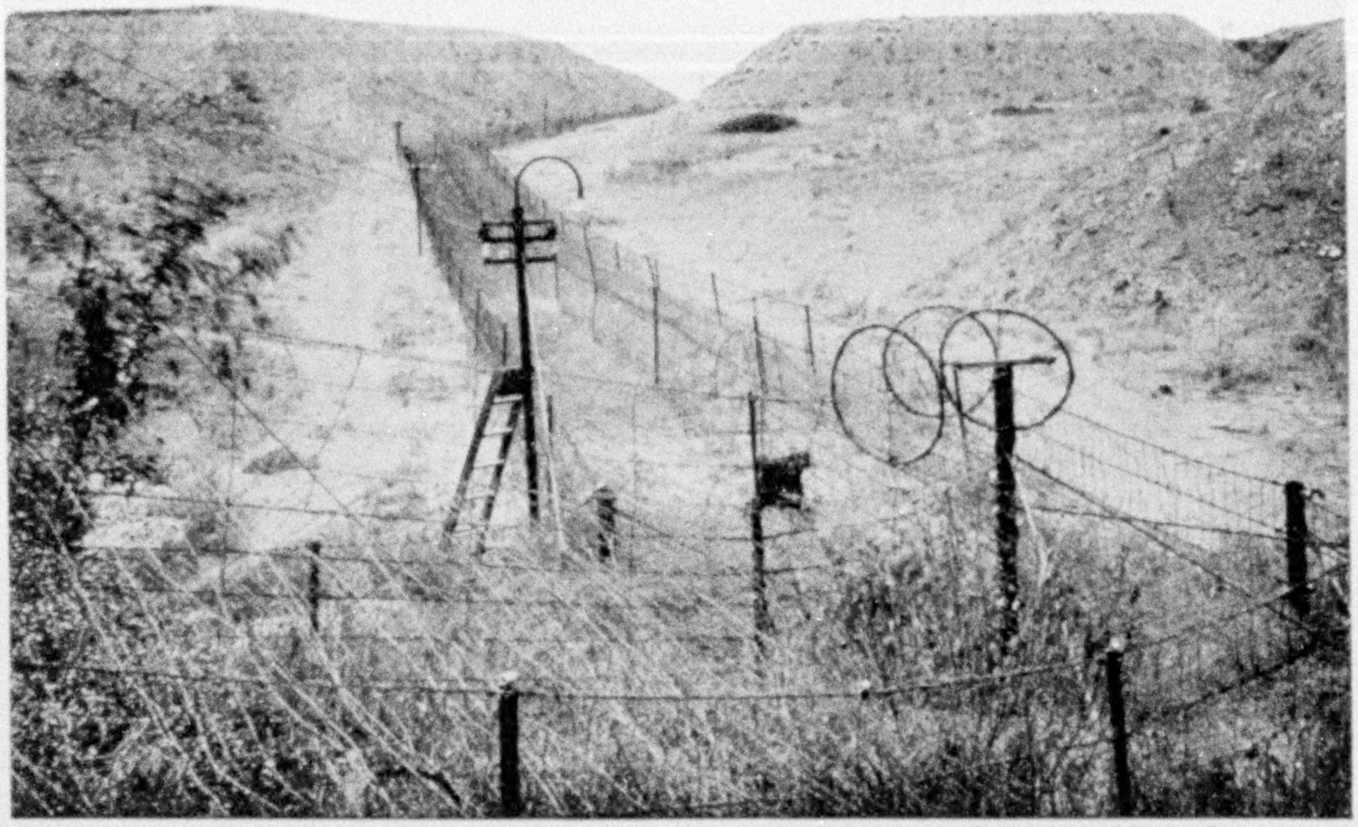
Among savage men, war and the preparation for war are a large part of the day's work. With no more wars in prospect, with no enemies to raid, how are the Matabele men to be employed?

Near the towns they find the odd jobs of the white man's civilization attractive, but out in the blue, where thousands of them live, what are they to do with their surplus time? To them cultivating the land is women's work, degrading work. They have never done it. No man of warrior blood will do it except under protest.

Besides, their wants are simple. Their women easily are able to grow enough for immediate family requirements, and a savage rarely lays aside anything for the future.

So, as a South African puts it, "They sit around and rot."

We saw uncounted thousands of these "rotting" natives. Many of them were huge men, with bold, strong faces, masses of coarse wool, thick bodies, and heavy,



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WIRE ENTANGLEMENTS AROUND A KIMBERLEY DIAMOND MINE

Many methods of preventing diamond thefts have been devised in South Africa. Besides having barbed wire and charged electric wire fences, mine operators keep close watch on native and white workers. The government aids by requiring all diamonds to be registered and all dealers to be licensed. It has been estimated that nearly 50 per cent of the diamonds taken out in the early days were stolen and sold secretly (see also text, page 259).

muscular legs, which distinguished them from the blacks of the tropical zones, who have slender, bowed legs.

Black men of the colder zones are strange anomalies. They have much of the vigor and courage of white men. Both the Zulus and the Matabele, who live in the South Temperate Zone, were strong and resourceful warriors—worthy foes of the white man.

They left their mark on South African history.

On the warpath these Matabele wore feathers in their hair, painted their faces, wore circlets of zebra-tail hair around their arms and just below the knees. They carried long multicolored oval shields of zebra skin, bows and poisoned arrows, and *assagais* (spears). When they attacked they arose out of nowhere in the high grass and hurled themselves on their opponents like fiends.

Broken Hill is the first white colony of importance as one travels south. Smart, fresh young Englishmen came down and promenaded the railroad platform. It was a treat to listen to them talk. They chaffed each other and exchanged familiarities with acquaintances on the train and managed to make a cheerful hour of it.

BROKEN HILL, THE FIRST IMPORTANT COLONY OF THE SOUTH

Towns like Tabora, Elizabethville, and Broken Hill are very attractive when described by soldiers of fortune, who tell a tale of glamour and romance. But oh, my friends, these towns are dull—dull!

They are simply villages existing under impossible conditions, with all the penalties of village life and few of the advantages.

The white man who can keep up his exercise, hold on to his self-respect, and maintain his sanity in a tropical village settlement deserves every man's congratulations.

"Out in the blue" is the proper phrase to describe the African country. To a slight degree it conveys to the mind a conception of the immensity of that astounding continent.

Here we saw the "blue" stretching away interminably.

A dust cloud appeared far off ahead of us. Soon a shape outlined itself. It was a prairie schooner with 16 oxen attached. A tall man, with whiskers and a slouch hat, walked alongside and cracked a 40-foot whip and shouted to the oxen. A woman and a five-year-old child were his passengers. They were going upcountry to seek their fortune.

Rhodes advised young Englishmen seeking their fortune in Africa to "go north," just as Horace Greeley advised Americans of a generation ago to "go west." They still follow Rhodes' advice.

THE GLORIES OF VICTORIA FALLS

The second day came Victoria Falls, the falls of the Zambezi River, discovered by Dr. Livingstone. These falls are broader and more than twice as high as Niagara (see illustration, page 232).

The great cataract is surrounded by masses of green trees. The country is wild and tortuous. Above the falls the Zambezi, a lazy, sluggish stream, makes haste slowly, hesitantly, blindly, till it reaches the edge of a narrow fissure in the basaltic rock. Then over it goes, headlong into the chasm. From the point where it disappears into the froth until it emerges a quiet river again, it has cut a cavernous passage through the rocks, sheer and deep.

The scenery is indescribably beautiful. We had a wonderful view of the gorge from the Victoria Falls Bridge. The mist from the cataract blows over the railroad coaches just as Rhodes wished it to.

There is more natural beauty to the Victoria Falls than to Niagara Falls, because the scenery is sylvan and undisturbed. But the water comes over in much smaller volume. For this reason there is not the terrible, majestic threat of Niagara.

The Zambezi pours itself into the gorge in several silvery streams, exquisitely proportioned like a well-planned sketch.

Bulawayo is the old capital of Lobengula, the last great chief of the Matabele. The name means the "Place of Slaughter," which suggests the gentle temperament of the old savage. "Off with his head," was Lobengula's favorite expression and the large part of his domestic policy. Thirty years ago unmitigated savagery reigned here; now Bulawayo is a presentable, orderly, civilized town.

AT THE TOMB OF CECIL RHODES

There we found a scrupulously clean English hotel; bathtubs and a plentiful supply of hot water. There we found ice cream and oranges and apples, newspapers, motion pictures, and automobiles to ride in, chocolates—and information about boats.

Rhodesia was named after Rhodes. They tell many tales of him in Bulawayo. Very little of the human man that was Rhodes is left in the glorified myth of him. His admirers want him all white, while he thought of himself as being "all red."

They have a statue of Rhodes in the very center of Bulawayo's main street. It looks toward the north.

We motored 28 miles to Rhodes' grave in the Matopo hills (see page 234).

The body rests in the tomb carved out of the solid rock, supposedly on the exact spot where Rhodes made peace with the Matabele chiefs in 1896.

The path that leads upward across the gigantic boulderlike mountain is steep and treacherous, but the top is what Rhodes once called the "World's View," a magnificent and turbulent sea of rocky ridges. The view is unobstructed on all sides. Rhodes Rock comes to a crest; the adjacent land falls away and leaves that crest supreme, alone.

The cavern hewn out of the rock, Rhodes' tomb, is covered over with a smooth copper plate, with the words engraved on it, "Here lie the remains of Cecil John Rhodes."

Thousands of near-by acres are preserved "forever" as a national cemetery and dedicated "to those who deserve well of their country."

Not far from Rhodes, Dr. Jim is buried.

Near Bulawayo, seven miles out, is another place of pilgrimage, the Khami Ruins. This prehistoric structure is sup-

posed by some antiquarians to be of Phœnician origin. Over the Khami River, on a promontory, some ancient people built a stronghold. Only stone walls remain. These are constructed with square-cut blocks, similar to modern paving stones (see also page 239).

If we accept the supposition that the ruins are of Phœnician origin, then these people came to South Africa for gold, diamonds, and copper. Numerous old diggings, old mines, are in the neighborhood.

IN THE RIDER HAGGARD COUNTRY

This is the Rider Haggard country, where he found the material for his soul-stirring tales. Near by he located "King Solomon's Mines." He made much romance from the indefinite ancient history of this curious land.

That the prehistoric people who built these Khami Ruins were a highly civilized race is proved by the exhibit in the Bulawayo Museum. There I saw gold beads, table tools, and, most interesting of all, a pair of handcuffs, such as policemen use. Immediately to one's mind handcuffs suggest law and order, and law and order imply civilization.

On close inspection this Rhodesian country is a disappointment. Of course, there are some choice bits, but much of it is dusty, rocky, raw, and barren. Here pioneer farmers have a difficult task before they can plant their crops. Much of the land is covered with shale and small stones.

One cannot deny the fact that somewhere in Rhodesia there must be crops and cattle. Bulawayo depends for its sustenance on that sort of trade. Nevertheless, when one thinks of Rhodesia, one thinks of mines.

On the return trip we met several parties of Matabele girls with huge baskets on their heads. They wore Scotch plaid kilts and shawls of Scotch plaid (see page 241).

To meet a group of these women, swinging along the road—with round, close-cropped heads, little swagger skirts, nothing much above them, stout tenpin legs, bare feet, smiling eyes, and glistening teeth—is to give one pause.

We stopped at the kraals and met and visited with old men who had fought in Lobengula's Impis (regiments).

A short time before we arrived, the voters of Rhodesia formally and officially rejected the proposition that Rhodesia should join the Union of South Africa. To an unprejudiced outsider, this did not seem to be "thinking in terms of continents."

The next stop was Mafeking, from which Dr. Jim (Jameson) started his raid, which precipitated the Boer War, and the town where Sir Robert Baden-Powell, founder of the Boy Scouts of Great Britain, and Chief Scout, endured a famous siege.

The tumult and the shouting have died; the captains and the colonels have departed. To-day in Mafeking heroism consists in producing more than one consumes.

AMONG THE BOERS OF THE VELDT

Crack! We stopped at a small station. Crack! Crack! It sounded like a high-powered rifle, but it was an ox whip, a whip for 16 oxen. A man stood in a dust cloud alongside his span of oxen. He "gee-hawed" them into line and punctuated his cries with the cartridge-like crack of his 40-foot whip.

These men were Boers, Afrikanders, Dutchmen.

Mafeking is the center of a cattle country, a farm country. The veldt was brown and beautiful. Spring was in the air.

We thought of Olive Schreiner and all that she had written about the vast and silent spaces of South Africa. Suddenly we were caught in the spell of that distinctive country.

We saw dozens of farmers, Boers, at work.

When the train stopped, natives urged on us carved-wood figures, giraffes and elephants and buffaloes, of their own crude manufacture. Other natives offered the skins of wild animals. Ostrich feathers were sold at prices which should make Parisian milliners weep.

Stolid, silent Boers stood about and said nothing—tall, lean, muscular men of Teutonic cast of countenance. They seemed resolute and tireless. Obviously

Photograph by Alfred I. Hart

SOUTH AFRICA'S VARIANT OF THE HAWAIIAN GRASS-SKIRT BALLET COSTUME

These masked native dancers are from Kentani, a district on the southeast coast of the Cape of Good Hope Province.

they belonged to this land. This they called home.

The veldt, tinted with purple heather, dipped and swelled. Peach blossoms and spring flowers were interspersed with cactus plants.

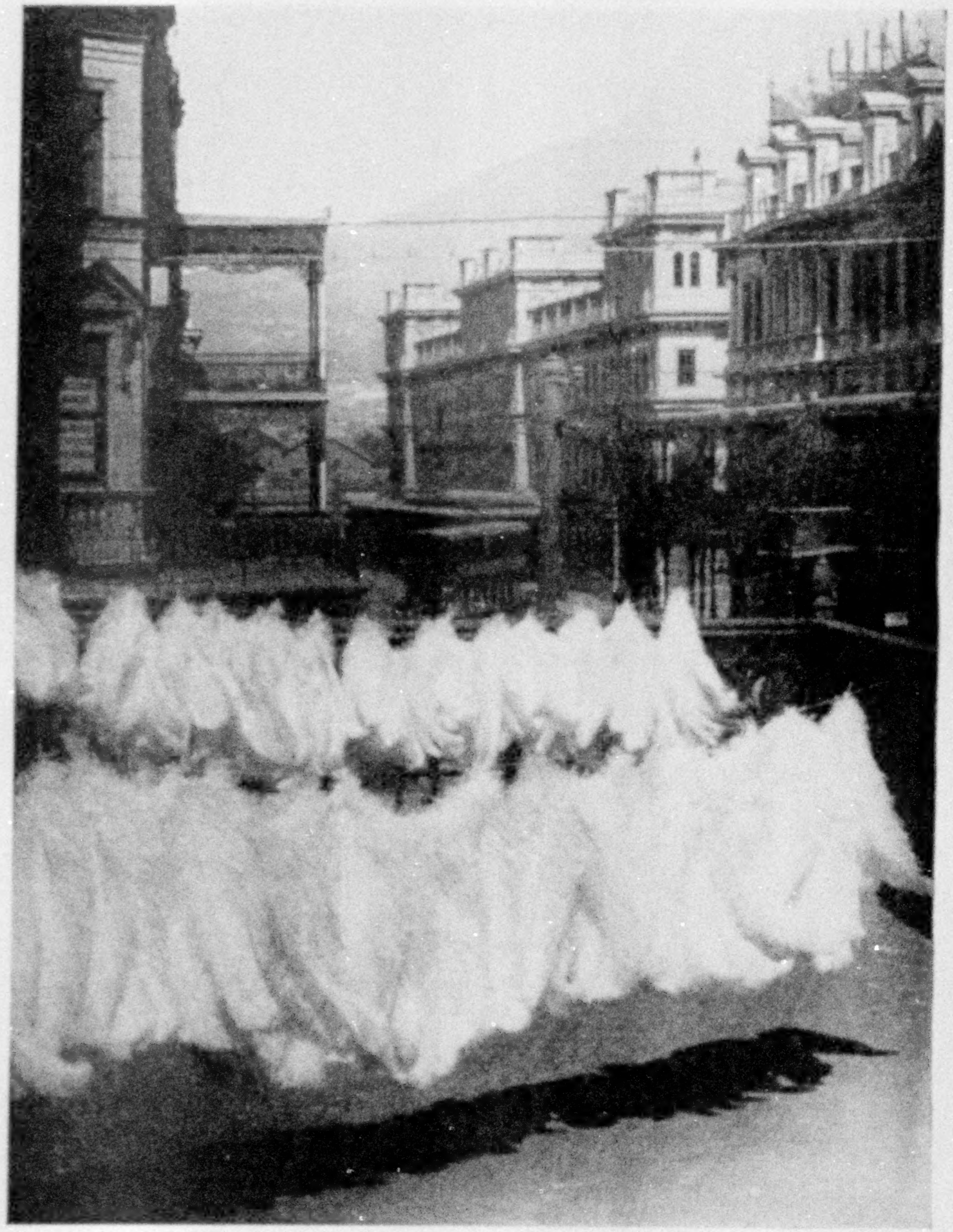
On the near horizon were the conical kopjes that protected the Boer army when it clashed with Kitchener and Lord Roberts. They lay in ridges, natural fortifications. We well remembered the frightful British losses.

The Boers hold to their racial instincts as strongly as ever. They were defeated, but not convinced. To this day they speak only Dutch among themselves. Many of them cannot speak English at all. When they surrendered to the British, they bargained for and secured the right for the Dutch language to share all privileges with the English language in South Africa. Therefore there are two official tongues. All announcements are printed in these two languages. All street signs are in two languages. That was one particular reason why Rhodesia refused to join the Union of South Africa. It wished to avoid this bilingual handicap.

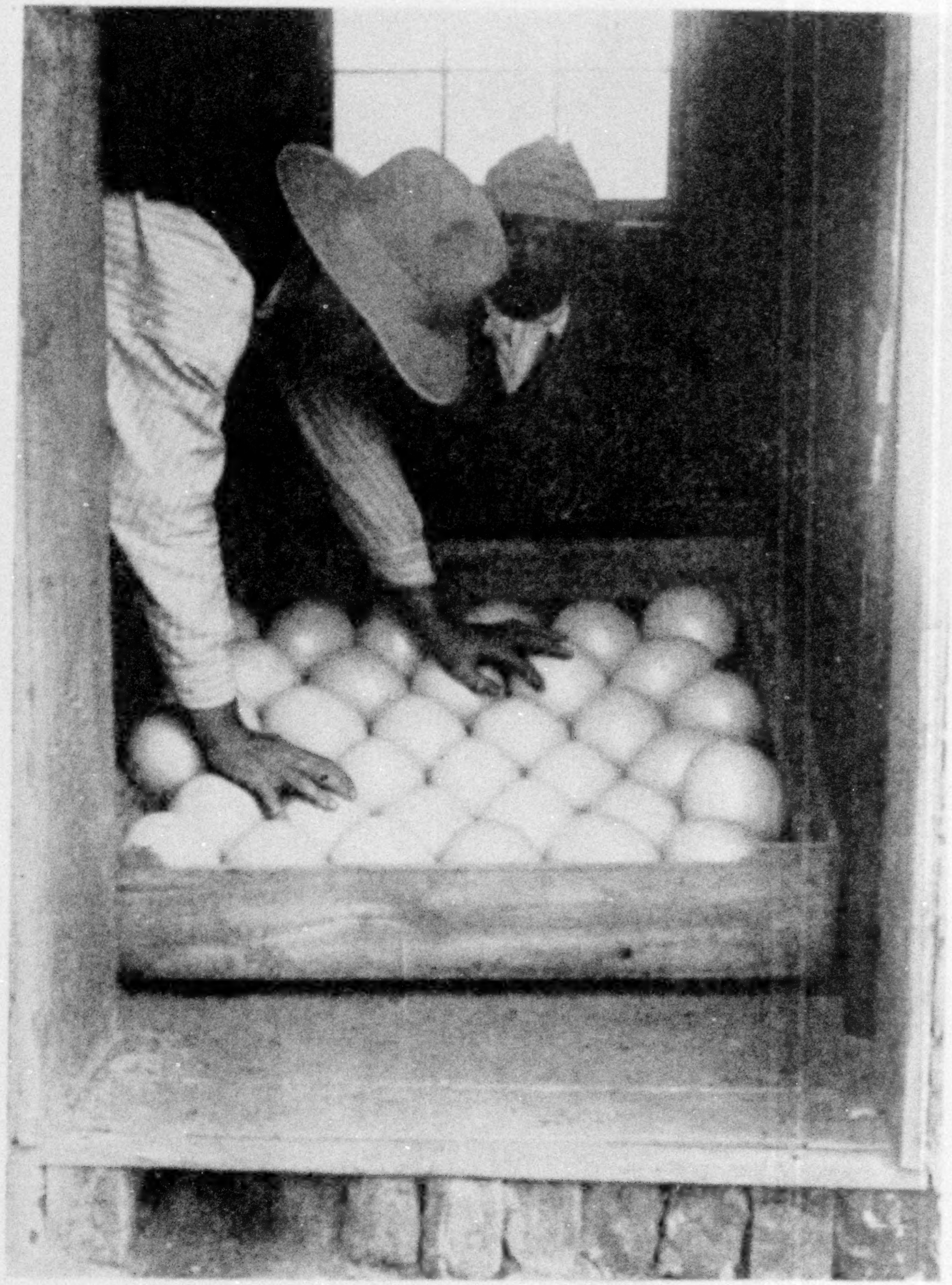
IN THE CITY THAT PRODUCES HALF THE WORLD'S GOLD

Johannesburg, nearly 1,000 miles northeast of Cape Town, is situated directly over the mines that produce more than half the world's supply of gold. In days gone by they called Johannesburg "the tin town with the gold cellar." It is no longer a "tin" town. It is an impressive city.

Of course, we wanted to see the gold mines. There are certain days when they are open to the public; other days, not. This was one of the "other" days. At the Crown Mines I came in contact with the superintendent. I suggested that unless we saw the mines then, we would never see them, as we were leaving the country within a week. While we talked, who should walk into the office but the "big boss" of the underground workings. Who should the "big boss" be but an American, a Californian.



AIRING OSTRICH PLUMES AT CAPE TOWN IN PREPARATION FOR SHIPMENT



HATCHING OSTRICH EGGS ON A FARM NEAR ROBERTSON: CAPE PROVINCE

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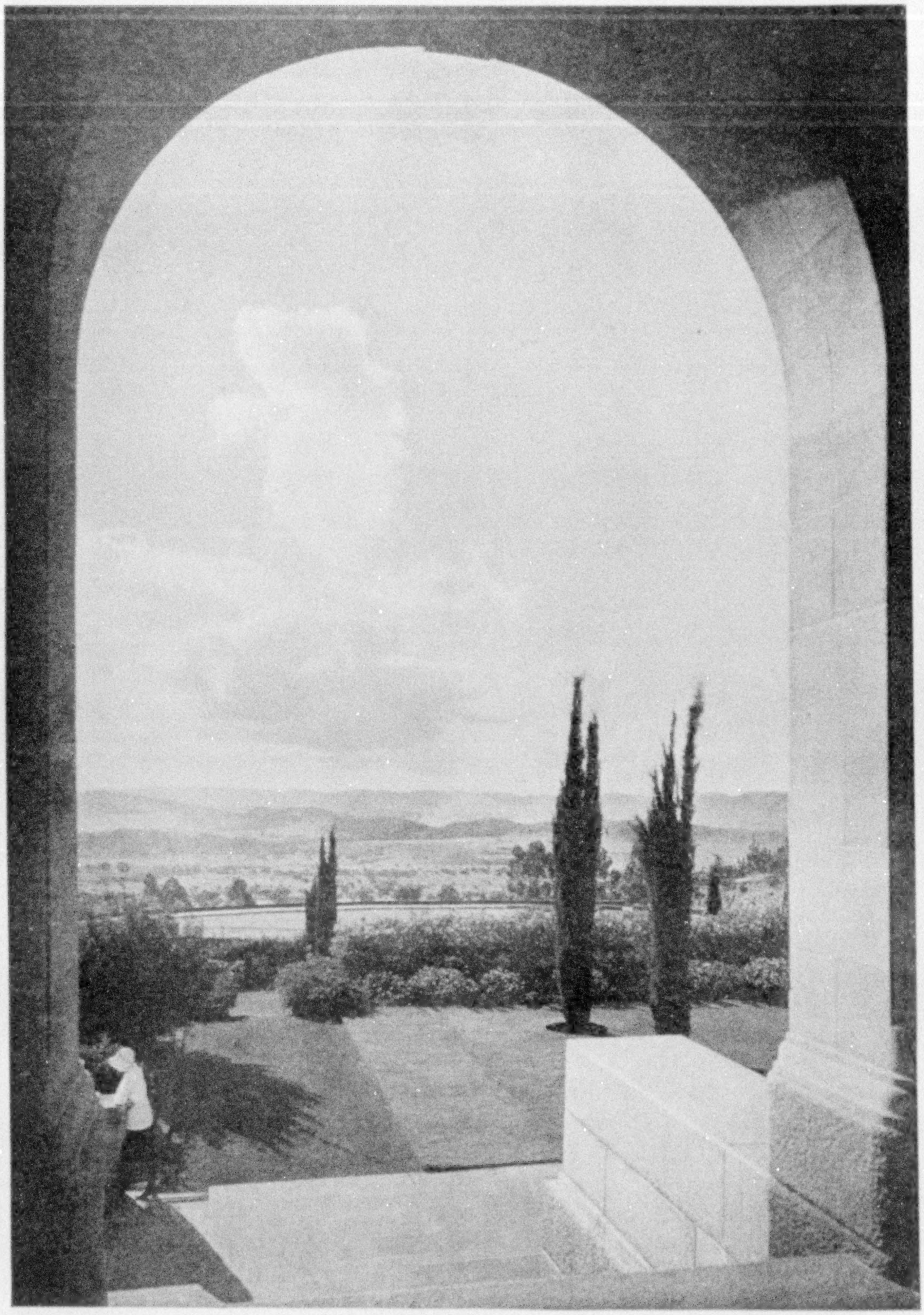
Photograph by Alan Yates

ONE OF THE WORLD'S FINEST CAPITOL BUILDINGS: PRETORIA, SOUTH AFRICA

The new government buildings of the Union of South Africa at Pretoria overlook a terraced Italian garden and the valley below. Two large wings are connected by a curving colonnade. The buildings accommodate 1,500 officials of the four provinces—Natal, Orange Free State, Cape of Good Hope, and Transvaal. South Africans apparently believe in separating the executive from the legislative in government; while Pretoria is the center of administration, Cape Town, where the legislature meets, is 1,001 miles away by rail.



Photograph by Alan Yates

LOOKING WESTWARD THROUGH ONE OF THE ARCHES OF THE UNION GOVERNMENT BUILDINGS, PRETORIA

The site of the Capitol, on a knoll about one mile beyond the center of Pretoria, has been described by Lord Selborne, formerly High Commissioner for South Africa, as "one of the finest in the world and chosen by people with courage and foresight."

THE RESIDENCE OF THE PRIME MINISTER OF THE UNION OF SOUTH AFRICA

"Groote Schuur," overlooking Table Bay, at Cape Town, was given by Cecil Rhodes for the official residence of the prime minister. It was Rhodes' home and it contains many of the possessions he prized.

"Well, Old Timer," I said to him, "now is the time for all good men to come to the aid of their party, and we are your party. We wish to go underground. We understand that you are the official fixer for unofficial Americans who have nothing to recommend them but their nationality and the purity of their purposes."

We had never been underground in a mine before, never in a cage before. This cage was a steel-box elevator, illuminated only by the miners' torches, which we carried. We were going down a mile. Cold, damp air surged up all around us. The bottom dropped out of the world on well-oiled skids. Down, down, down! At last we dropped on a cushion of air, paused, stopped.

A GOLD MINE ON 29 LEVELS

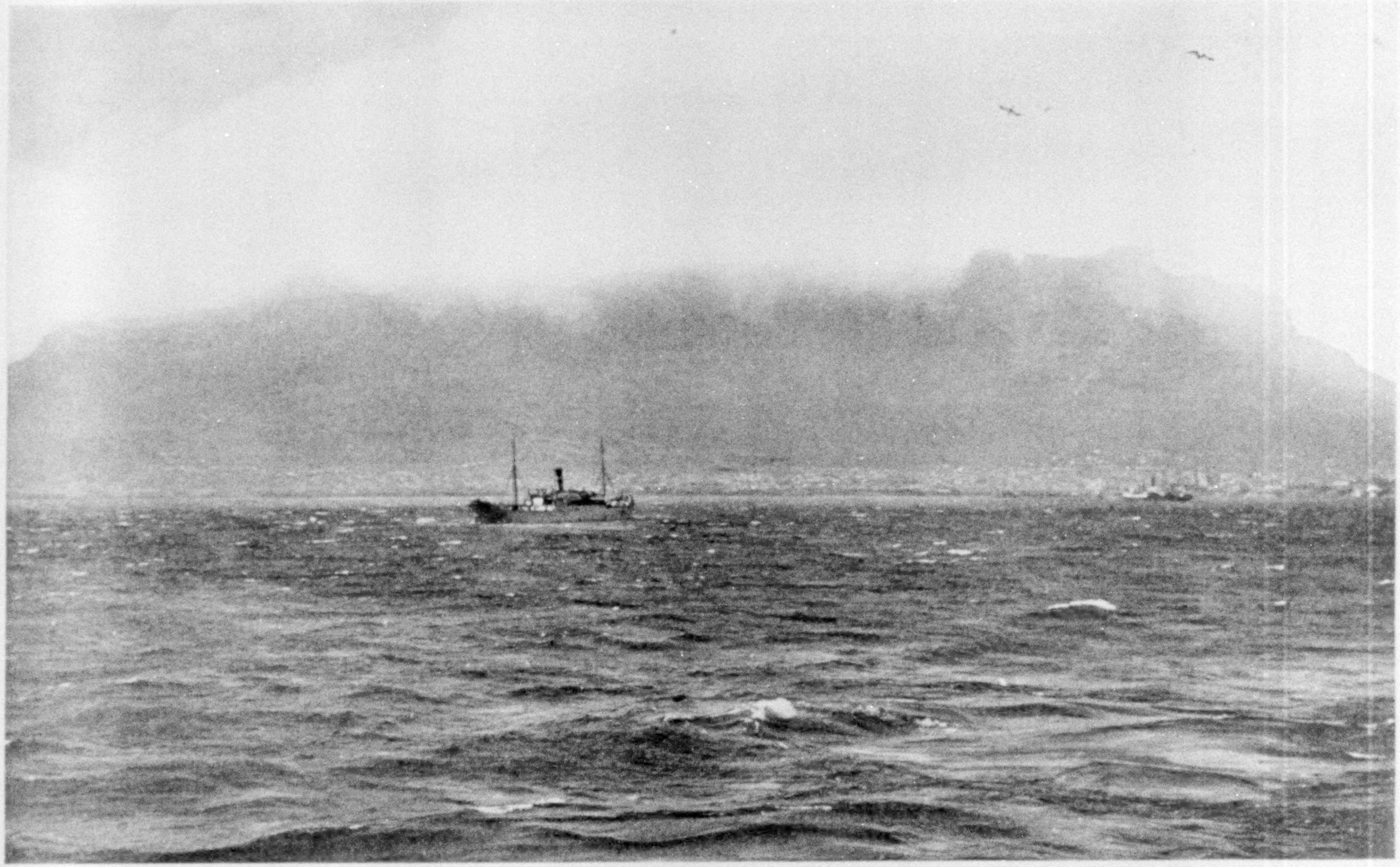
When we stepped out of the cage the "big boss" said something. I saw his lips move, but I could hear nothing. I was as deaf as a post, because of air pressure on the eardrums. I had been warned, but I had not expected total deafness. I stood there, mutely moving my jaws, rubbing behind the ears. Soon the deafness passed.

There are 29 levels to this mine—29 floors—a skyscraper upside down. Nine thousand men work underground. This one mine covers 18 square miles.

One expected to find gold nuggets protruding from the walls of the subterranean passages. One expected to find pockets of the precious metal. I had done some literary mining in my time with Sindbad the Sailor and Baron Munchausen. Imagine my surprise when I discovered that the gold in this greatest of all gold mines was not visible at all.

The stratum that contains the gold starts near the surface and points like a jagged flash of lightning toward the world's axis. This stratum of ore rock cuts through the 29 levels of this mine and enables the miners to attack the ore-bearing vein at different levels.

Presently our special train arrived. We were propped up on top of an electric dump cart, with an exposed live wire less



Photograph by Dr. Wm. T. Lawrence

TABLE BAY AND TABLE MOUNTAIN, CAPE TOWN, SOUTH AFRICA

Table Mountain, with its extension, Lion's Head, rising directly behind the town, makes this one of the beauty spots of South Africa and one of the finest harbors in all the world. "Good-bye and Good Hope" is South Africa's farewell to the departing voyager.

than a foot overhead. All the way we were supremely conscious of that wire, particularly when we whizzed round corners and it rattled on the bracket.

Black and white faces peered at us, smiled at us, through the gloom as we rushed by.

Gold was discovered in Johannesburg in 1886.

PRETORIA'S MAGNIFICENT CAPITOL GROUP

The second day in Jo-Burg we detoured to Oom Paul Kruger's old capital, Pretoria. Pretoria is 45 miles from Jo-Burg. The finest thing in all South Africa, and probably the finest group of public buildings in the world, are the Union Buildings in Pretoria (see illustration on page 255).

The Pretoria Capitol Buildings rest on a slope, a ridge over the town. They are artistically a part of the eternal hills. They have balance, proportion, dignity. What the Taj Mahal is among religious edifices, the Union Buildings are among capitols.

We paid a visit to the local cemetery, where Oom Paul stands in bronze, easing his rheumatic foot on his cane. This unromantic figure was one commander who guaranteed his men nothing—no uniforms, no food, no medals, no pay, no pensions, no benefits, no bonuses—nothing! He gave them the privilege of going out to shoot and be shot at; to die for a cause they believed in. From 14 to 80 they volunteered.

The last night in Johannesburg we visited a suburb to hear General J. C. Smuts, the Premier, speak—Smuts, who was one of Kruger's officers and who was so conspicuous a figure at the peace negotiations in Paris.

He was to address a miners' meeting. There were some 500 men seated in the hall when we arrived. As the evening progressed, another 500 stood behind the last rows of benches or draped themselves along the side walls. Smuts' turn came to speak. He stepped forward and waited for silence. There was no silence! Instead, there was an uproar.

We sat in the 20th row. For a long hour we never heard a word that was spoken by General Smuts. The miners sang, shouted, hooted, hissed, booed, in English and in Dutch. For an hour this uneven contest continued. Then General Smuts left the platform, his message undelivered.

Next morning the pro-Smuts Johannesburg newspaper said:

"There were 1,000 people present and at least an equal number outside. Appeal for a fair hearing for the Premier was unheeded. They kept up a continuous uproar. At one time it looked as if the platform would be rushed."

IN THE KIMBERLEY DIAMOND MINES

We visited Kimberley, the roaring mining camp of 30 years ago. To-day it is dull, drab, respectable. The diamonds are all controlled by one combine. There is no more excitement in present-day Kimberley than there is in a cheese village in Holland. After one has seen the open cavern in the earth where Rhodes found his first fortune, one has seen all there is of dramatic interest.

Those who are supposed to know say there are enough diamonds in the mines of Kimberley to make these jewels as common as glass beads if they were marketed, competitively or indiscriminately.

Obviously the output must be restricted; it is. Obviously prices must be maintained; they are.

These diamond mines in Kimberley are worked by blacks, who are held in corrals, virtually as prisoners. Once they leave the employ of the mines they may never return. All the measures one can imagine, and some one cannot imagine, are used to prevent these blacks from stealing the diamonds. They have a special treatment for those who attempt to swallow diamonds, and another treatment for those who succeed in swallowing them. They lose few diamonds.

ON THE LAST LAP: "GOOD-BYE AND GOOD HOPE"

The train that carried us to Cape Town left Kimberley at 3 a. m. and arrived at 8 a. m. on the second morning.

With the journey's end in sight, both of us were extremely impatient. Up-country we grouched a little when luck failed us, but philosophically accepted what fate brought and tried to make the best of it. I know that I worried very

SOUTH AFRICA'S MONUMENT TO CECIL RHODES

The estate of "Groote Schuur" has many memorials, chief among which is the Doric temple and bronze figures of Physical Energy, the monument erected by the Union of South Africa to honor the man who conceived the Cape-to-Cairo route. Broad grounds surrounding the estate are a preserve for the zebra, buck, and other animals of the country.

little, except when the fever was excessively troublesome; then I had to consider whether or not I would arrive at all. Otherwise time did not seem important.

But here, on the home stretch, the minutes dragged. The train seemed unnecessarily slow.

We were at once comfortable and restless. We passed by dozens of Dutch farmhouses—white, square, squat. They suggested the Pennsylvania Dutch farmhouses of America; but this rocky, barren, treeless land is not at all like the rich and fruitful Pennsylvania valleys. The bleakness, the dreariness of South Africa amazed us after the gorgeous luxuriance of the land farther north.

We finished breakfast. Cape Town was but an hour away. We passed stations and saw the familiar figures of commuters waiting for the 8:10 train.

We rolled into the Cape Town station. We stepped out on to the platform. We ignored the baggage porters who were trying to attract our attention. We solemnly shook hands while the amazed commuters looked on.

"Cairo to Cape Town! Why not?"

Next morning at daybreak we sailed for England.

We planned to be on deck to see the ship leave its moorings, to watch Table Mountain fade from view. We kept the appointment.

So did one other couple.

A young fellow stood on the dock, while an attractive girl leaned over the ship's rail. They spoke in undertones. But as the ship moved slowly out into the stream, I distinctly heard the young man speak the Cape's farewell. He spoke the words in the form of a question:

"Good-bye and Good Hope?" he called to the girl.

She touched her finger tips to her lips, waved them to him, and answered, "Yes, *Good Hope!*"

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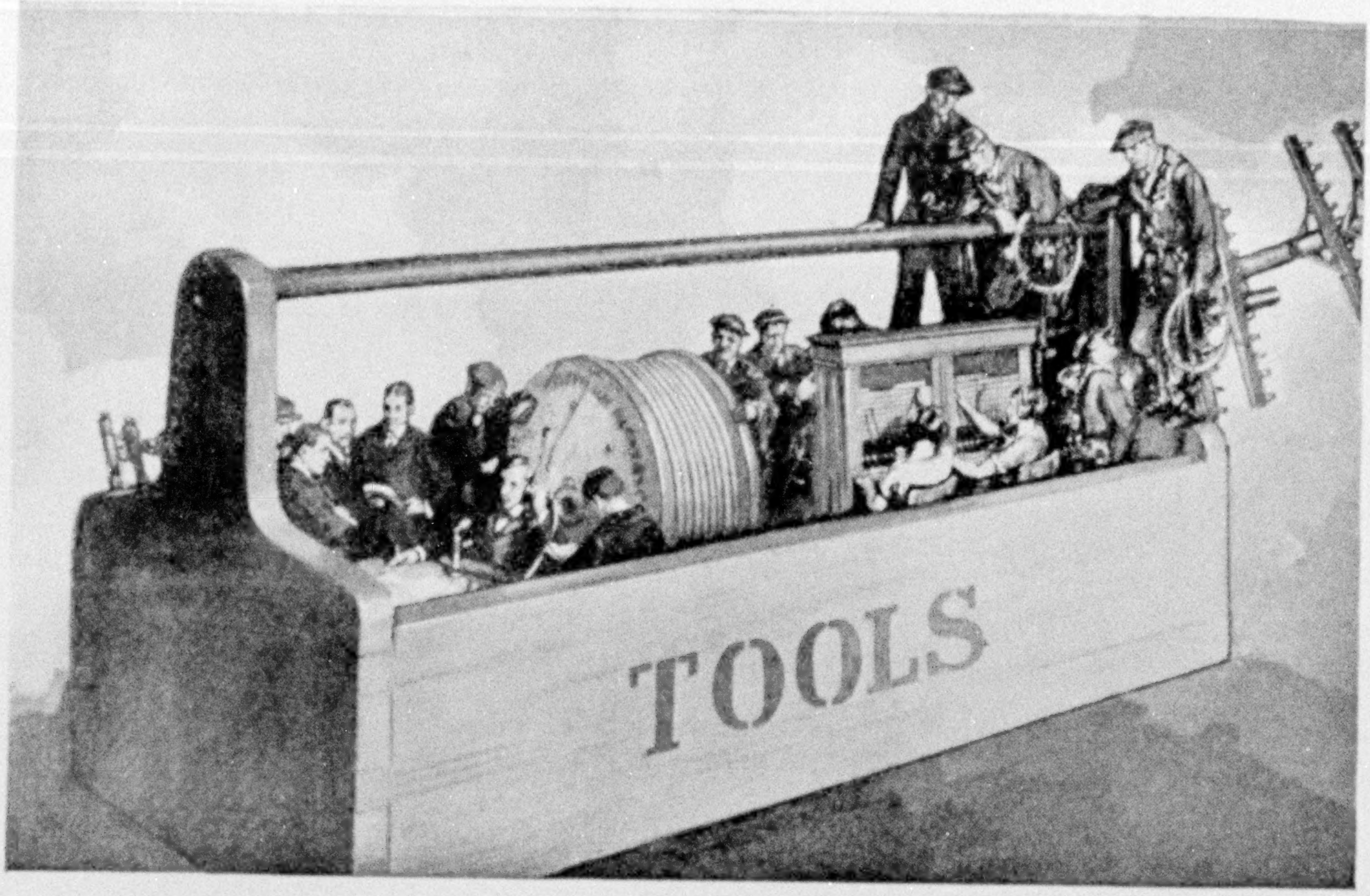

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The tools of service. The national, two-billion-dollar Bell System, handling fifty-eight million telephone calls a day, must be enlarged and extended while in use.

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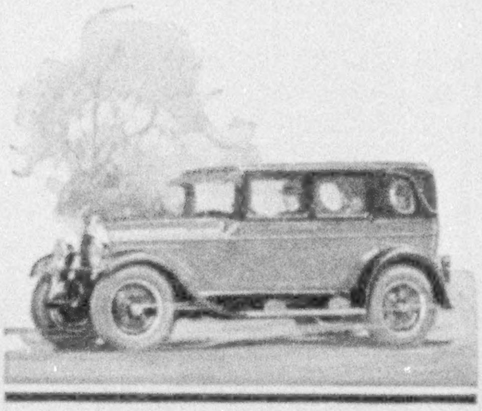

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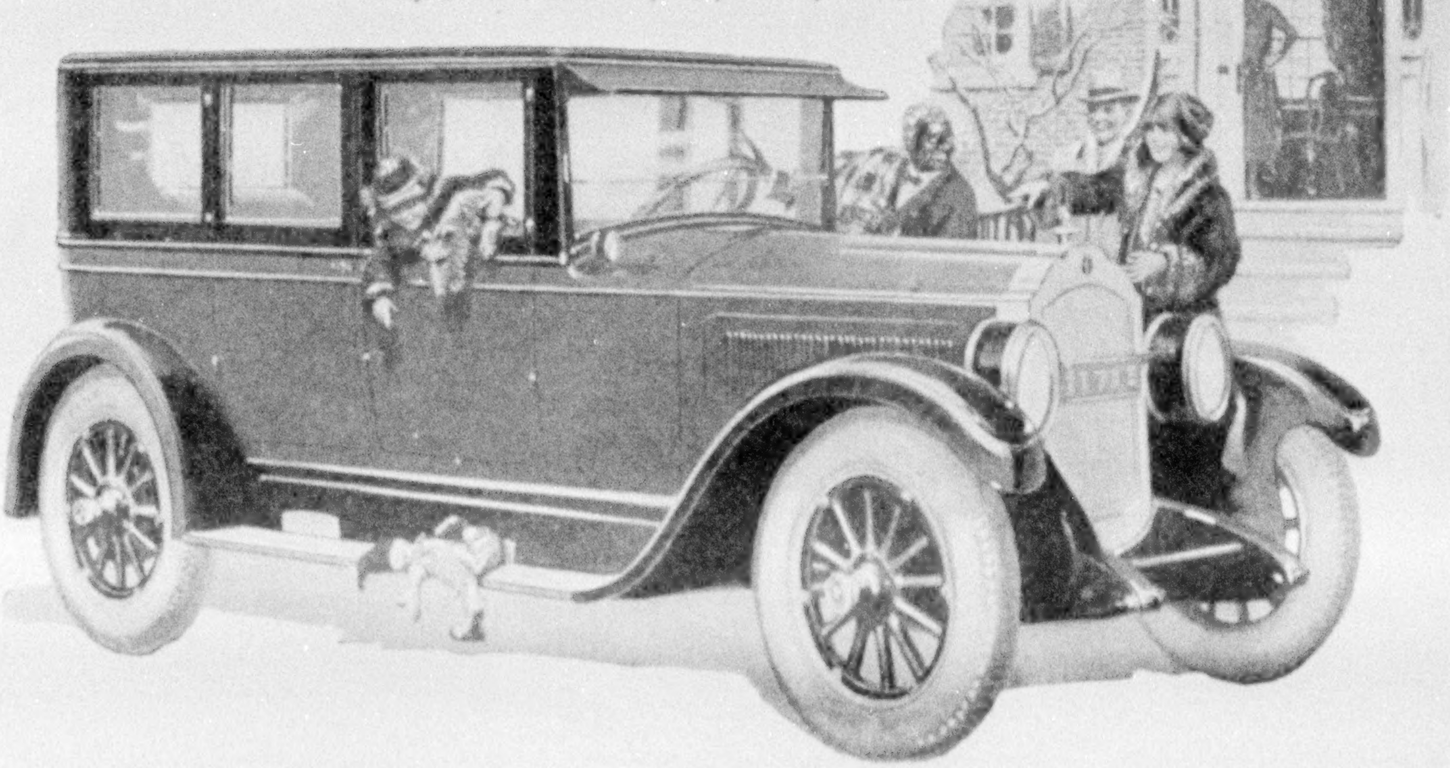

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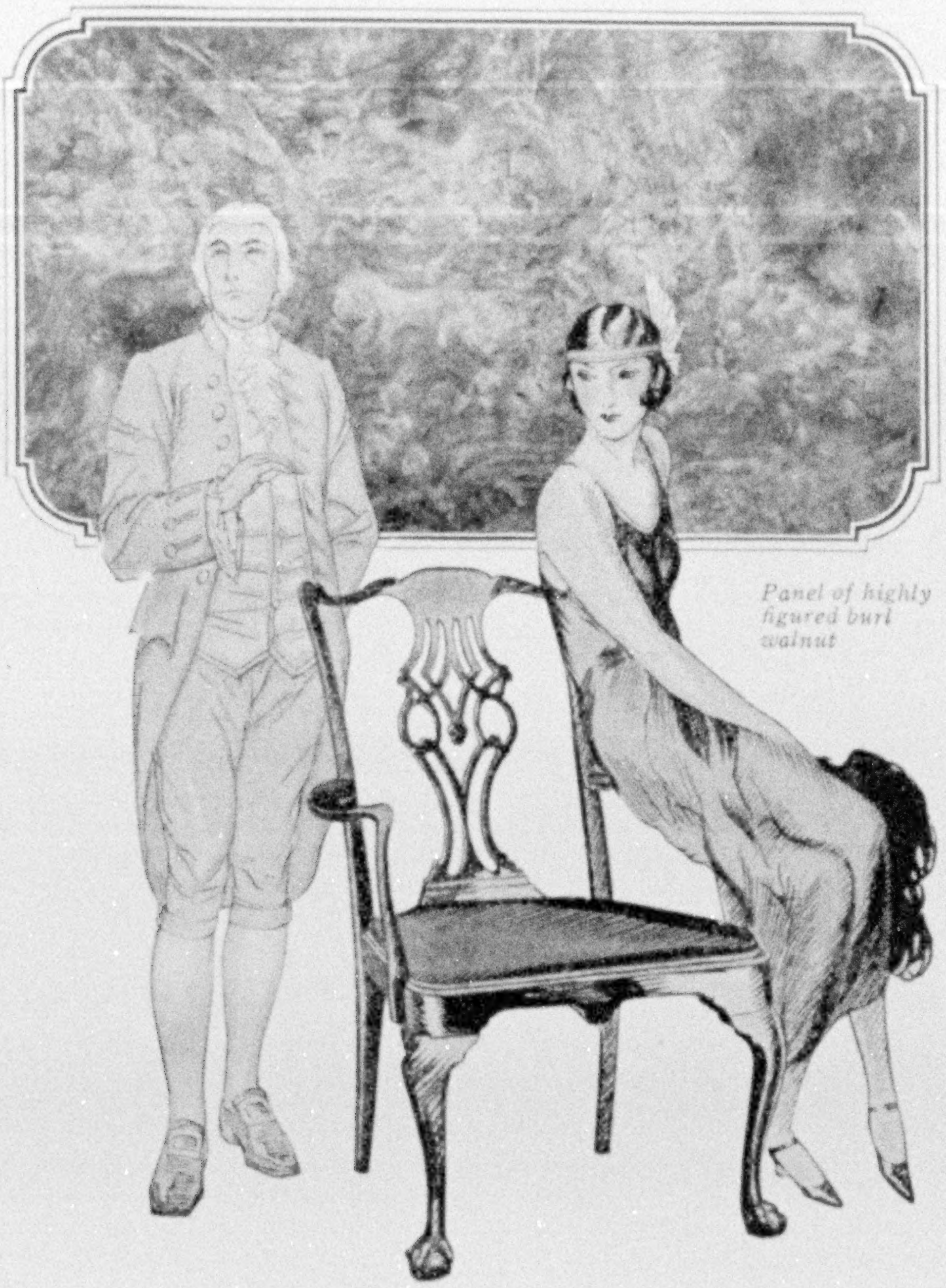

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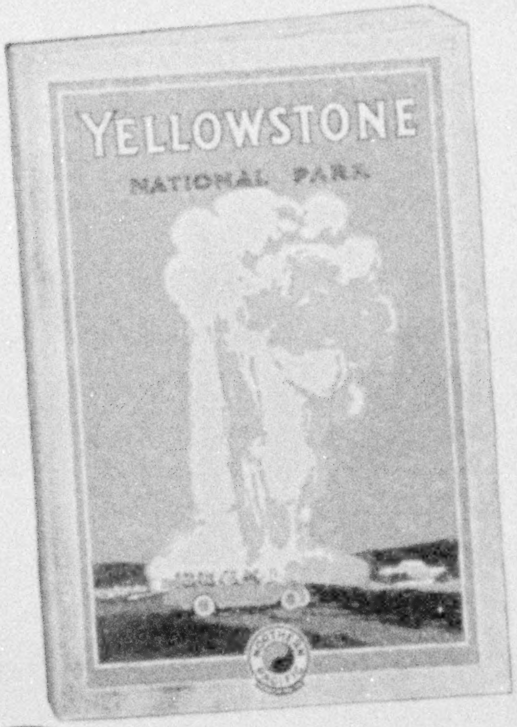

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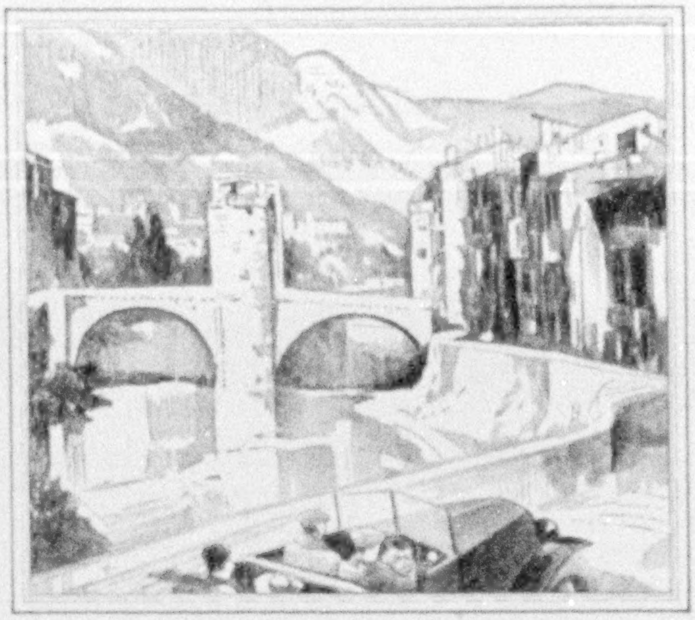

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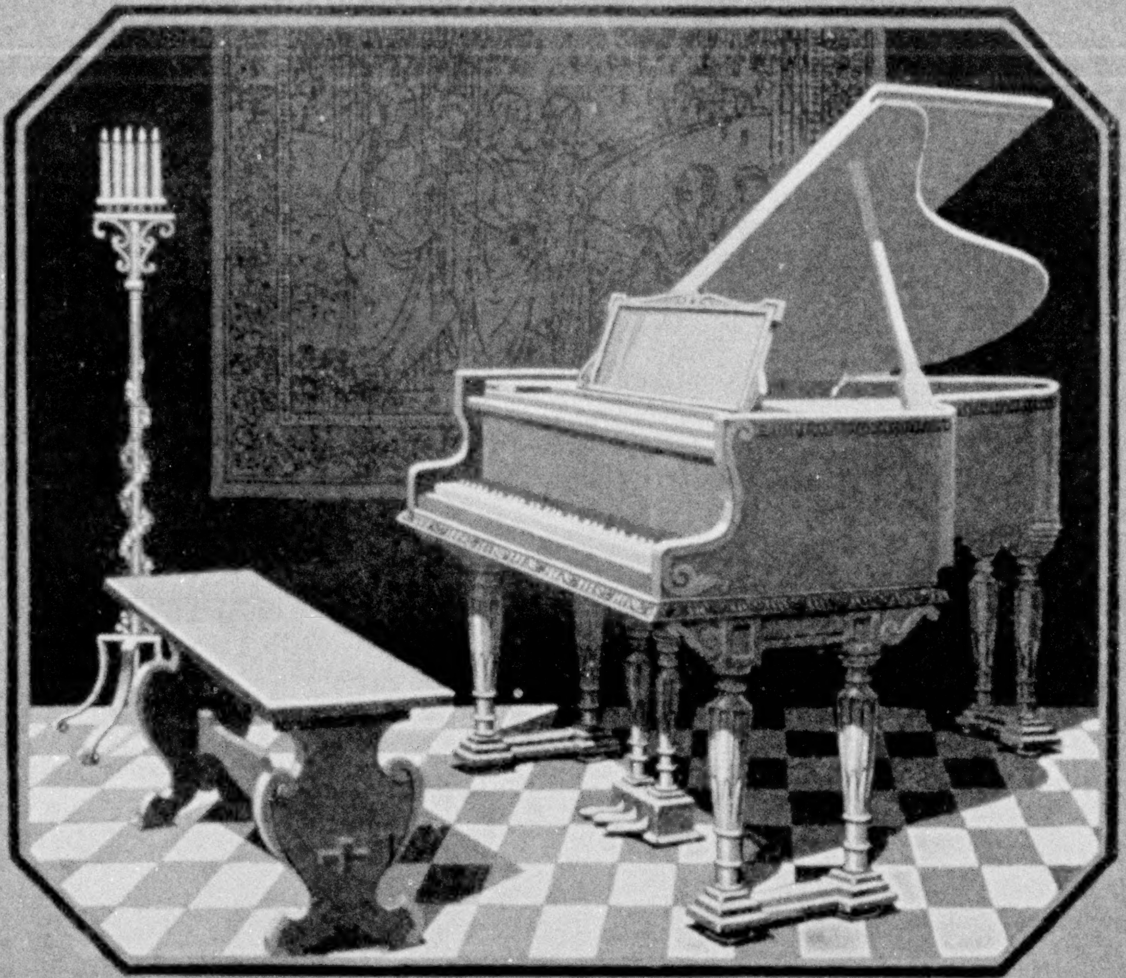

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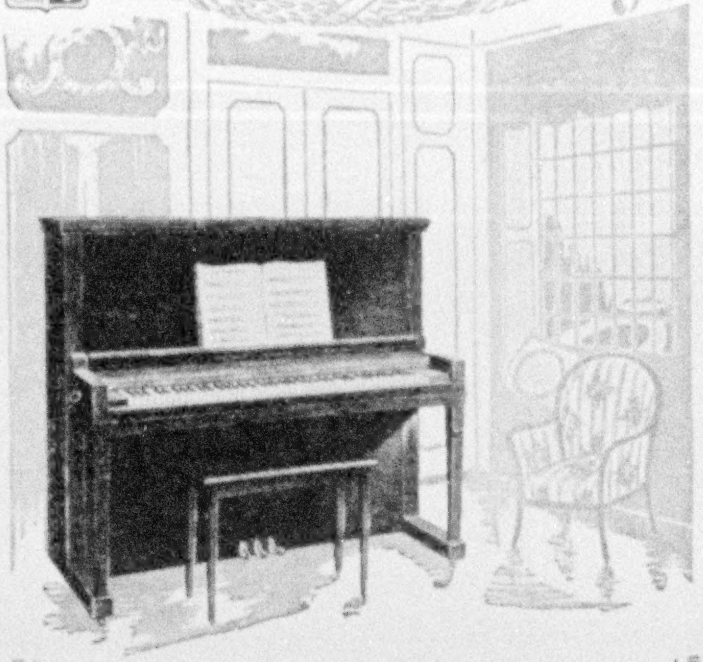

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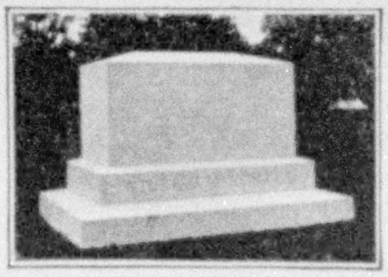

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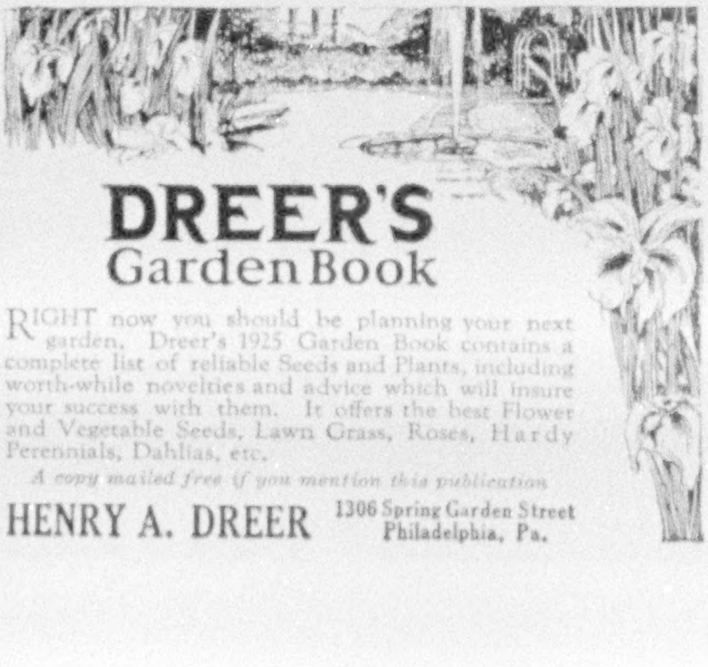

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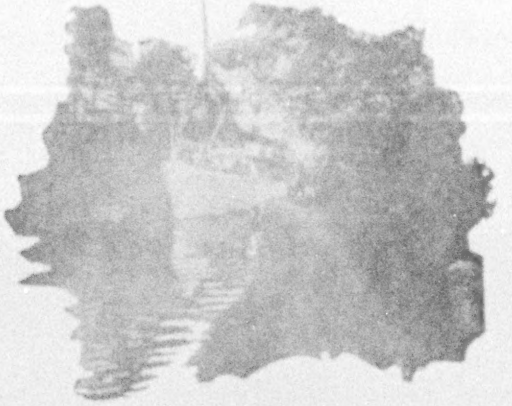

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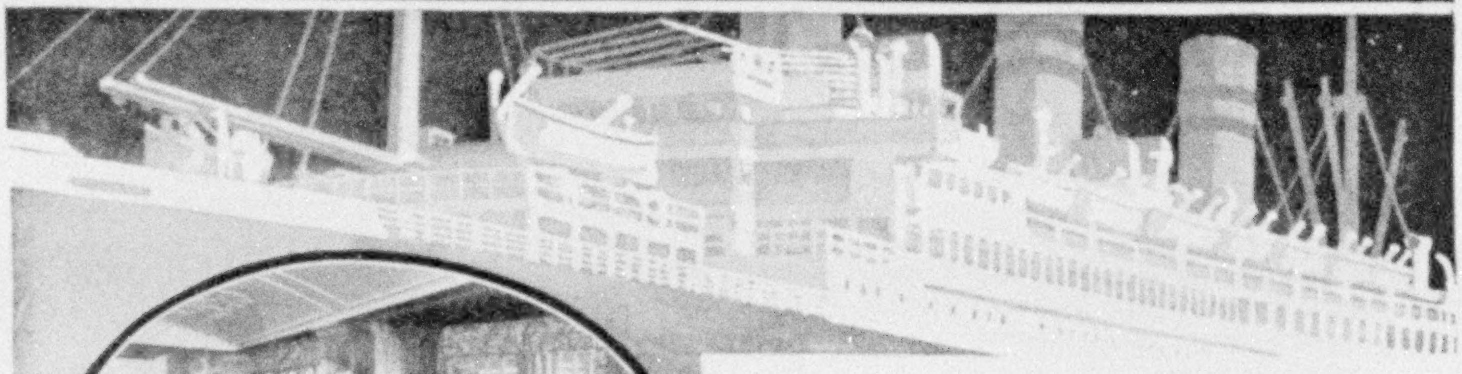

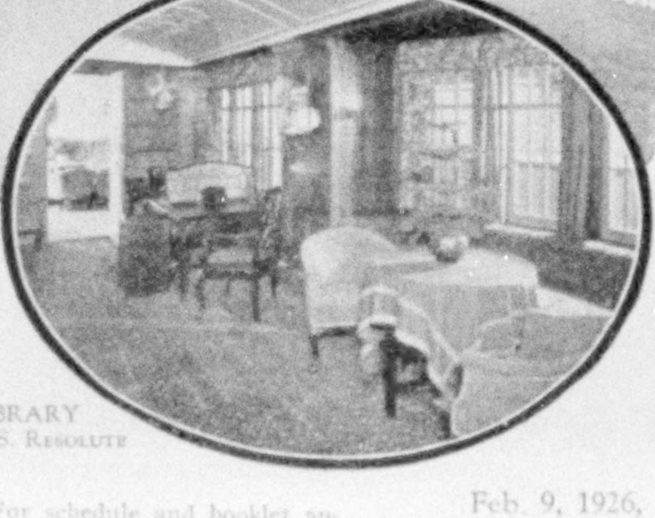

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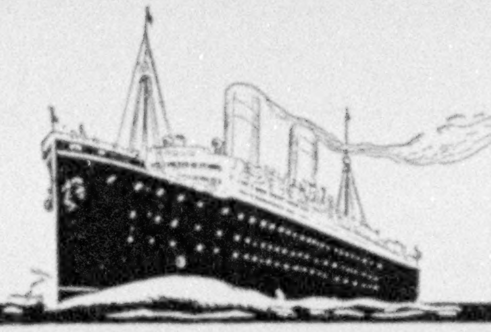

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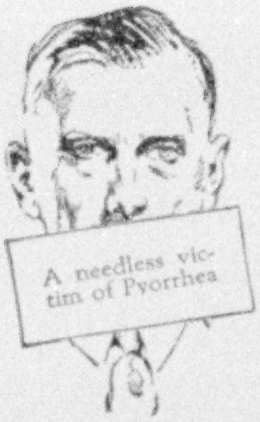

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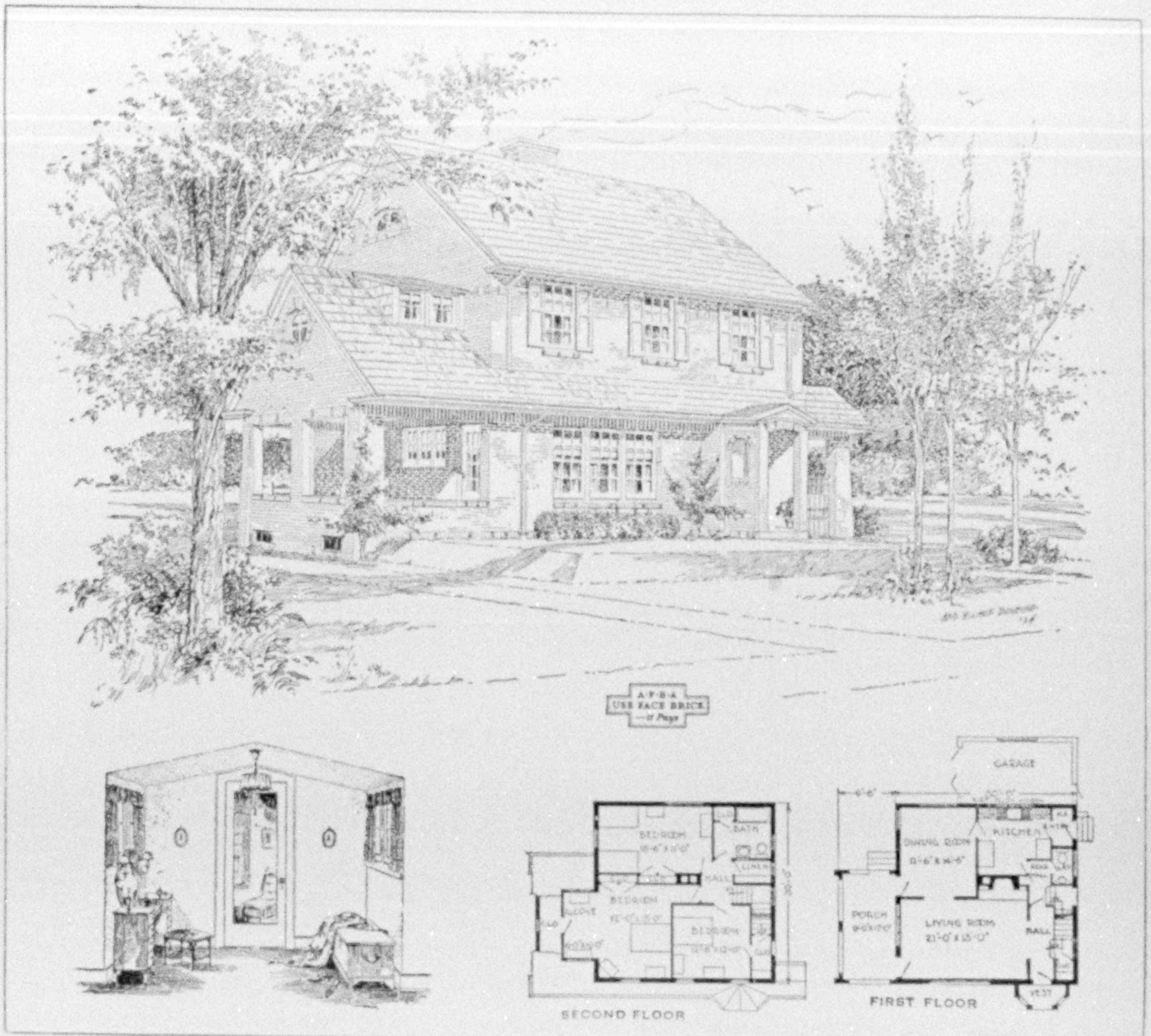

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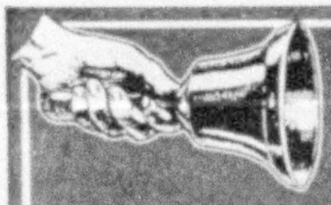

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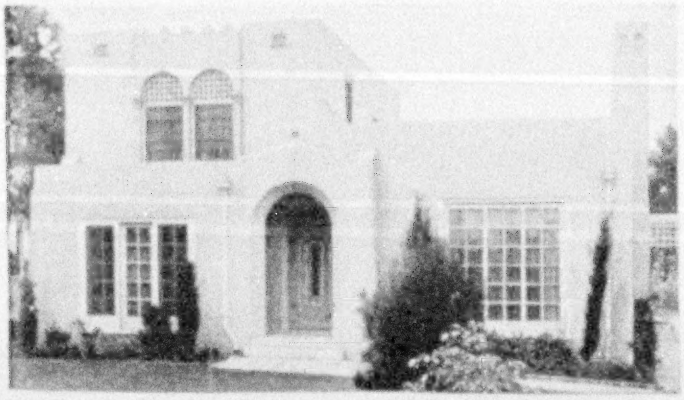

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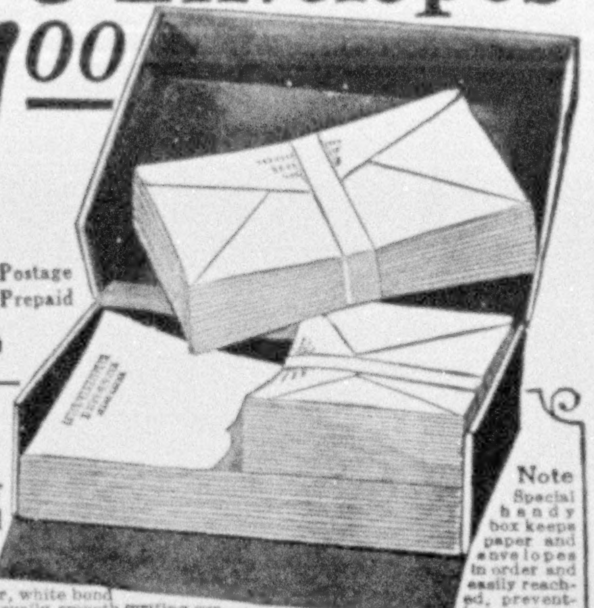

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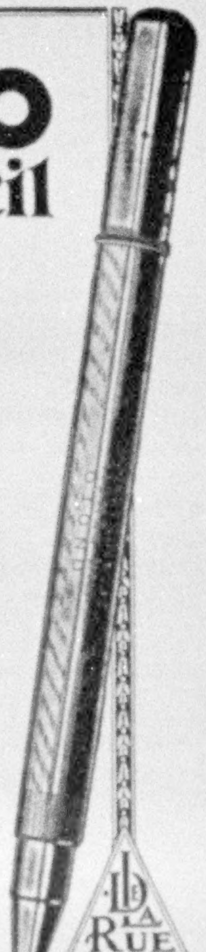

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This "Who's Who of the Wild Flowers" enables even a child to identify and name quickly and positively the 242 varieties of wild plants—including all the State flowers—which pique our curiosity on nearly every stroll in yard, park, or countryside. Accompanying these remarkable color plates are flower "biographies" which tell, in a simple but fascinating narrative, the things we want to know about wild plants—how they grow and what purpose, as medicine or food, they serve. It is a veritable bouquet of wild flowers that never fade in beauty or interest. Invaluable in the home—indispensable for schools.

The BOOK OF FISHES

Game Fishes, Food Fishes, Shellfish and Curious Citizens of American Ocean Shores, Lakes and Rivers

By John Oliver La Gorce and Other Authorities

Illustrated with full-color portraits of 92 fishes in under-water action, painted by Hashime Murayama; 134 other engravings; 244 pages.

Fishermen, big or little, will find lasting delight in the remarkable color plates which should enable easy identification of their catch, however unusual. The fascinating fish biographies and chapters on fishing and fisheries are by such authorities as John Oliver La Gorce, Miami Aquarium; Charles Haskin, Townsend, N. Y. Aquarium; Hugh M. Smith, former U. S. Commissioner of Fisheries; L. L. Mowbray, N. Y. Aquarium; Dr. John T. Nichols, Natural History Museum, and F. W. Wallace. The ideal gift for sportsmen.

Royal Octavo (10 x 7 in.); art binding in brown, bronze, and gold; $4 each, postpaid in U. S.; foreign mailing, 25 cts. Booklet in full color on request. Obtainable only from the

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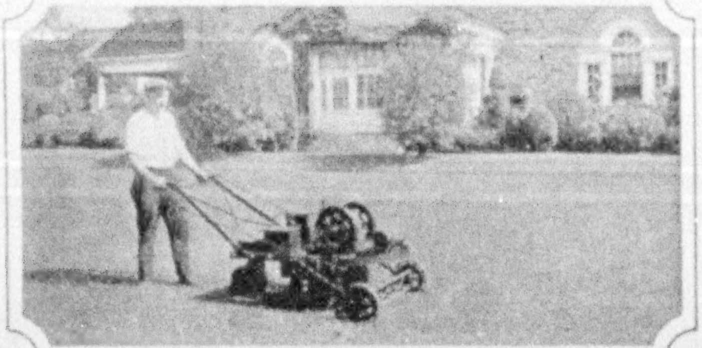

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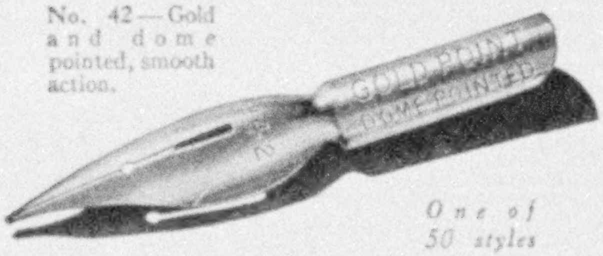

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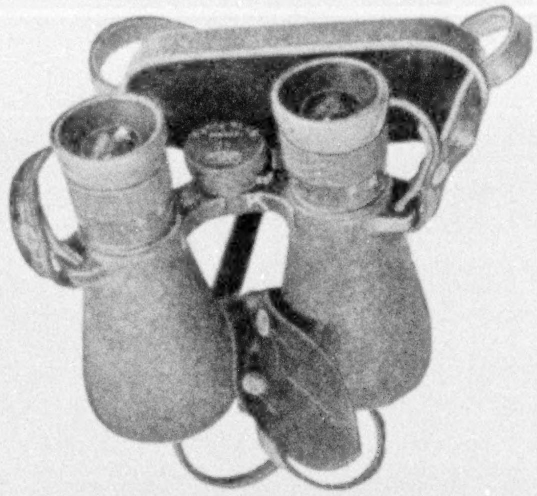

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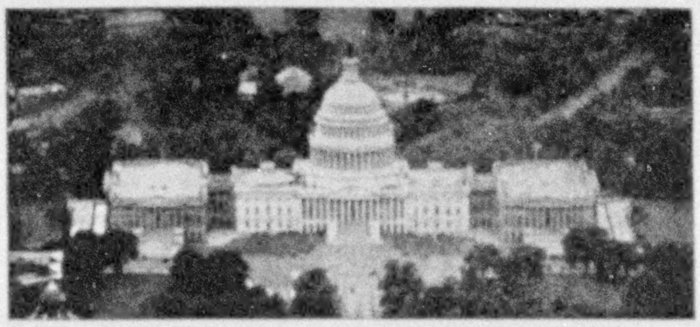

Before Inauguration Know Your Capital

Is Washington a mere dot on a map to you? Or do you, its owner, know and enjoy it? This Americanizing book is a faithful guide and, in addition, has a distinct readable charm.

The Capital of Our Country

By CHARLES MOORE, U. S. Commission of Fine Arts; CHIEF JUSTICE WILLIAM HOWARD TAFT; GILBERT GROSVENOR; J. R. HILDEBRAND; and the late VISCOUNT JAMES BRYCE.

16 full-page autochrome plates in exact color; 118 black and white engravings; 2 maps; 154 pages. These illustrations include the newer monuments, such as the Lincoln Memorial and the Arlington Amphitheater, as well as the older shrines.

Royal Octavo (10 x 7 in.); Cloth, $3, postpaid in U. S. A. Foreign mailing, 25 cents.

National Geographic Society
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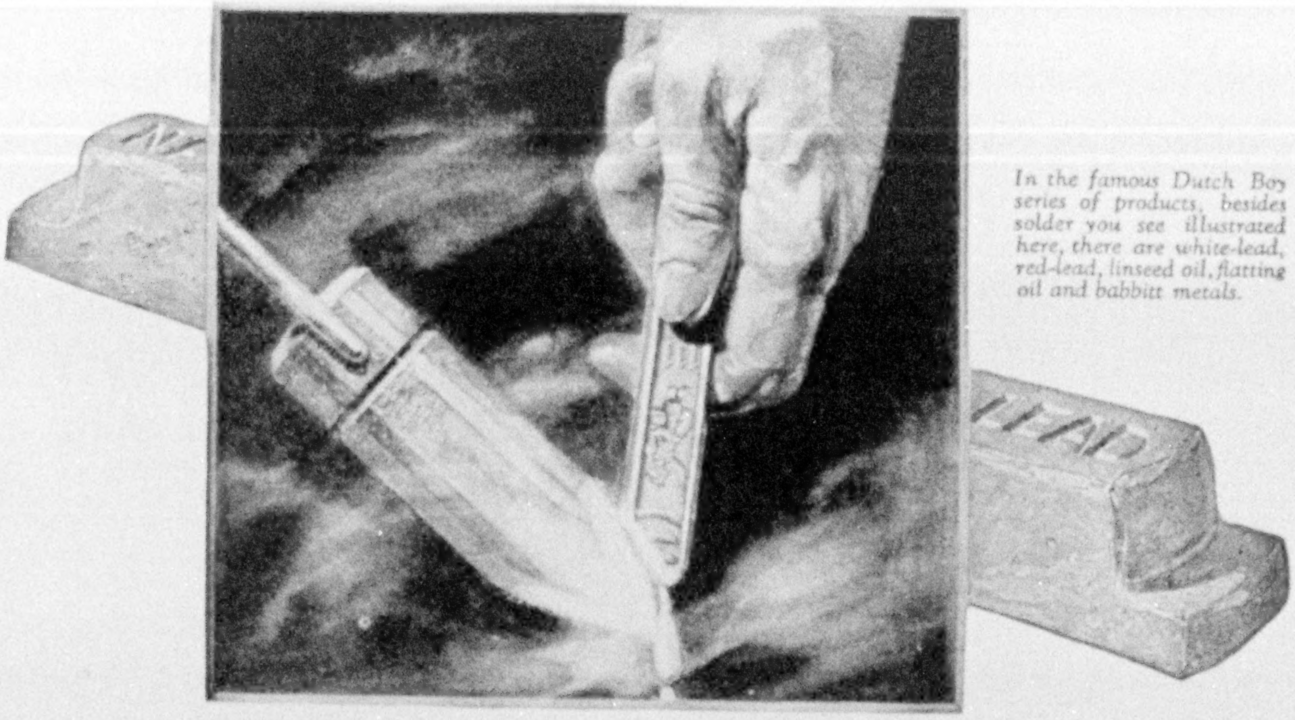


In the famous Dutch Boy series of products, besides solder you see illustrated here, there are white-lead, red-lead, linseed oil, flatting oil and babbitt metals.

"SODDER"

The Glue of the Metals

SOLDER is to the metal worker what glue is to the cabinetmaker. The origin of the word *solder* means "to make solid." Lead mixed with tin makes this solder, whose use is to join metal to metal, to seal metal containers and to patch holes in metal.

Why is lead used in soft solders? Because pure lead combined with pure tin produces an alloy whose melting point is below that of either of these metals and therefore is below that of the metals to be joined, even though these metals be lead and tin themselves. This alloy also adheres to zinc, copper, brass and even iron and steel, joining them in perfect union.

Thousands of workers use the soft solders made by National Lead Company under the Dutch Boy trademark. The Dutch Boy series of solders, numbered from 111 to 888, has been scientifically selected to cover every possible requirement of the solder user.

National Lead Company also will furnish solder of any formula required, in a variety of shapes, sizes, lengths and weights. It makes bar, wire, ingot, triangular, drop, segment, round, half-round, strip, and ribbon solders.

Lead in paint

Of all the important uses of lead the most general of all is the use of lead paint. From lead is made white-lead, famous for generations for the protection it gives to the surface it covers.

House owners, more today than ever before, protect their properties by covering them with constantly maintained coatings of white-lead paint. They know they can depend on it to save the surface and thus save their houses from rot and decay.

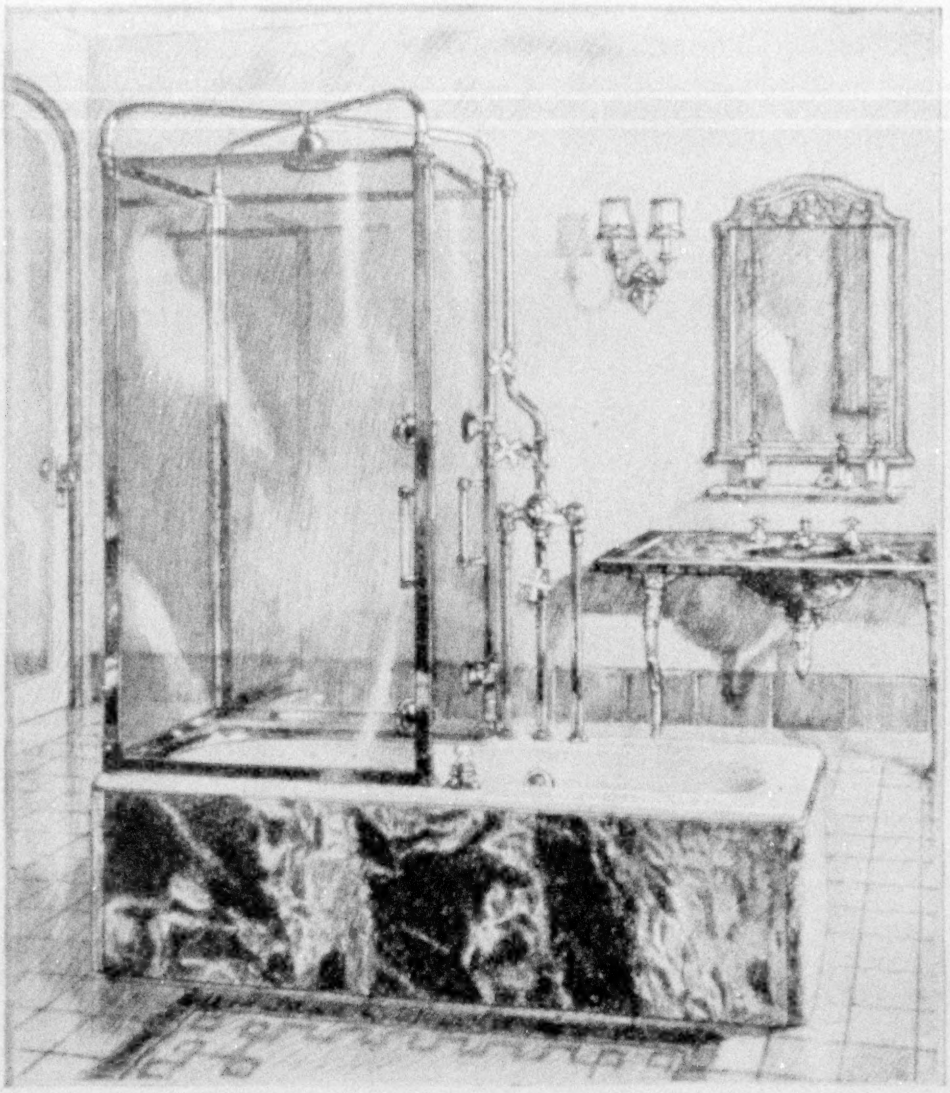
National Lead Company makes white-lead of the highest quality and sells it, mixed with pure linseed oil, under the Dutch Boy trademark.

National Lead Company also makes lead products for practically every purpose to which lead can be put. If you desire specific information about the use of solder for any purpose or about any of the other uses of lead, write to our nearest branch for complete information.

NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 900 West 18th Street; Cincinnati, 659 Freeman Avenue; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 485 California Street; Pittsburgh, National Lead & Oil Co. of Pa., 316 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.

CRANE BEAUTY IN THE OPEN: CRANE QUALITY IN ALL HIDDEN FITTINGS



CRANE CRYSTAL SHOWER INCLOSED IN PLATE GLASS. SHOWN WITH TARNIA BATH SET IN BLACK AND WHITE MARBLE

THE ease with which the combined *Crystal* Shower and *Tarnia* bath can be adapted to any arrangement you desire is a great advantage in planning your bathroom.

They can be set in five positions: in a right or left corner, in an alcove, against a wall with ends free or entirely in the open, as illustrated above.

Inclosed on three sides in plate glass, the *Crystal* shower admits light and air freely, and eliminates clinging curtains yet is splash-proof.

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THIS SETTLES THE QUESTION OF AN OIL BURNER

"By George, it must be 20 below tonight!"
"Well, cheer up, my dear, you'll never know it here."

SOONER or later, someone was bound to perfect an oil burner.

When you read this, you will realize that it was done six years ago. You can judge for yourself.

Six years ago we perfected a new kind of oil burner. Not because others were being built. But because none we knew of followed the four laws of oil combustion.

Proved for 6 Years

Inventions of such great importance are not perfected in a week, a month, or a year. They must develop. But your basement should not be used as a laboratory.

The fact that every one of the 20,000 Oil-O-Matic users is more than satisfied is evidence that the public was not asked to pay for our developments.

Automatic, Quiet, Odorless

All that folks ask now is an oil burner that is past the experimental stage—*a finished product*. One that requires no attention. That starts and stops itself. That is thoroughly reliable. That burns cheap fuel oil so perfectly there is no smoke, soot or odor. So efficient that even in zero weather it is shut off nearly one-half of the time.

Such an oil burner awaits your inspection.

These Facts Are Vital

Only seeing it and talking with owners will ever convince you. So look for these things:

Open the door of the furnace and you will find *no* part of the Oil-O-Matic inside. There's nothing to burn out or replace. Of course there's no continuous pilot light.

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But the crowning feature of Oil-O-Matic is the exclusive Thermal Safety Control. It's all but human.

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Oil-O-Matic works perfectly with any good heating plant. Steam, vapor, hot water, hot air.

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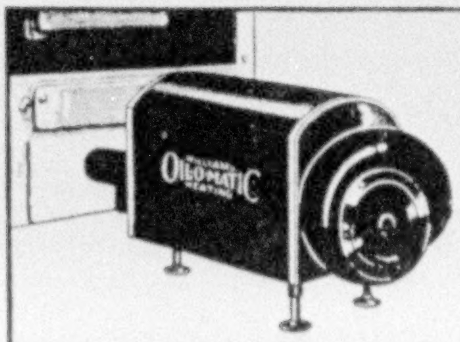

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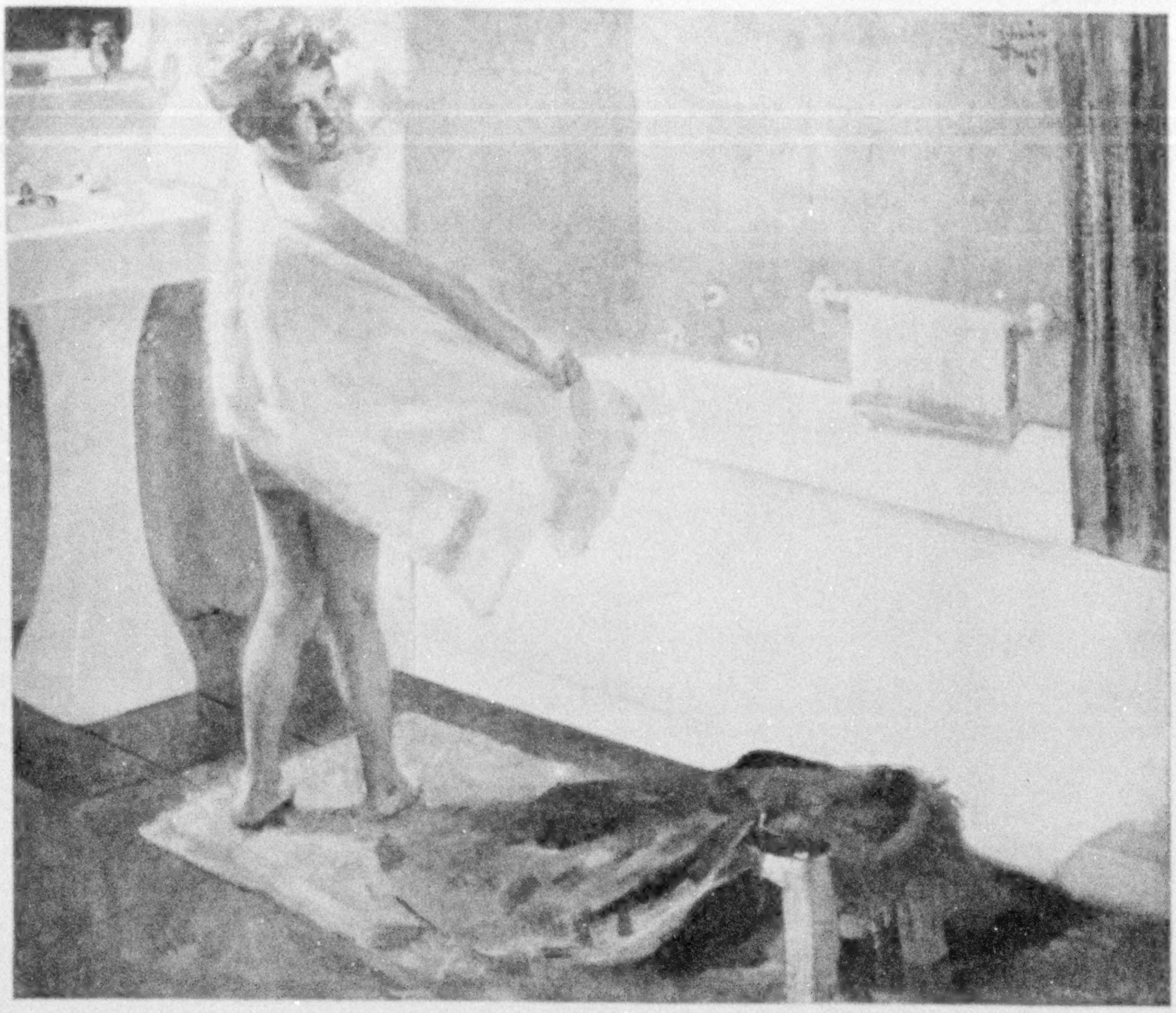

American Club, Kohler, Wisconsin

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THOSE who know about such things, place Kohler Enameled Plumbing Ware in a rather special and exclusive class. They recognize in its correct and beautiful design, in its snowy purity of color, and in the superb refinement of its enamel, the quiet signs which distinguish the exceptional from the merely good. And yet, Kohler Ware costs no more than other ware of acceptable quality. . . . . When you select plumbing fixtures look for the name "Kohler" in the enamel. May we send you Booklet E?

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